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ABSTRACT

Training Opportunities in the Private Sector (TOPS) was a small-scale, voluntary program operated as one among many employment-related options available to recipients of Aid to Families with Dependent Children in Maine's Work Incentive (WIN) Program. TOPS was distinguished from Maine's other WIN demonstration activities by three program elements. It was a prescribed sequence of activities--prevocational training, unpaid work experience, and subsidized on-the-job training, preferably in the private sector. Second, it was intended to reach harder-to-employ clients. Third, it tended to involve more intensive use of staff time. A comparison of the experiences of an experimental group of TOPS participants with a control group that did not have access to the TOPS sequence indicated that TOPS produced employment and earnings gains that contained throughout the 3-year follow-up period. The combination of earnings gains and no welfare reductions led to substantial increases in the total measured income of TOPS enrollees. Because of the relatively high cost of the program and the absence of welfare savings, however, TOPS did not pay for itself from the perspective of government budgets within a 5-year period. (MN)

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MAINE

The Demonstration Of State Work/Welfare Initiatives

Final Report On The Training Opportunities In The Private Sector Program

Patricia Auspos
George Cave
David Long

U.S. DEPARTMENT OF EDUCATION
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MAINE:
FINAL REPORT ON THE TRAINING OPPORTUNITIES IN THE PRIVATE SECTOR PROGRAM

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March 1988

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The TOPS program in Maine was one of six AFDC grant diversion projects funded with special demonstration funds from the federal Office of Family Assistance. In implementing the evaluation, MDRC benefited from the support and encouragement of Howard Rolston, currently with the Family Support Administration, U.S. Department of Health and Human Services, and other staff at OFA.

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the entire study. Barbara Goldman, as manager of the cross-state effort, has also played a leadership role throughout the research. Both provided a comprehensive review of the whole report. Michael Bangser helped draft the Executive Summary and Chapter VII, and also reviewed the report. Daniel Friedlander made important contributions to the impact analysis. Greg Hoerz was the manager for this report and also analyzed the worksite interview data. James Riccio reviewed the benefit-cost chapter.

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The Authors

PREFACE

This is the final report on MDRC's evaluation of Maine's Training Opportunities in the Private Sector (TOPS) Program. TOPS offered a prescribed sequence of activities that included pre-vocational training and unpaid work experience and ended in on-the-job training (OJT) positions. Operated as a small-scale, voluntary program, it was one of many employment-related options available to recipients of Aid to Families with Dependent Children (AFDC) in Maine.

The TOPS evaluation provides the first opportunity for MDRC to examine the results of a relatively intensive voluntary program in its multi-state Demonstration of State Work/Welfare Initiatives. The other programs evaluated to date in MDRC's multi-state project (in Arkansas, California, Illinois, Maryland, Virginia, and West Virginia) were all mandatory, generally low-to-moderate-cost initiatives that served a broader segment of the WIN caseload. TOPS is also of interest because, through an innovative funding process known as grant diversion, it utilizes AFDC funds to cover part of the cost of the OJT positions. The final report in the MDRC Work/Welfare Demonstration, to be released this fall, will study another voluntary, grant diversion-funded OJT program in New Jersey.

The Demonstration of State Work/Welfare Initiatives is a unique opportunity for MDRC to work with states in evaluating their employment programs and to examine a subject of national and state concern: the critical relationship between work and welfare dependency. Addressing state issues in a manner that benefits policy at many levels is a challenge that MDRC is privileged to undertake.

This demonstration documents a shift in responsibility from the federal government to the states. The individual studies evaluate the initiatives designed and implemented by the states themselves under the provisions of the Omnibus Budget Reconciliation Act of 1981 (OBRA), which, for the first time, authorized states to operate Community Work Experience Programs (CWEP) for AFDC and to streamline the administration of their Work Incentive (WIN) systems. Since states responded to these options in different ways, the demonstration is not built around a single model. Rather, the evaluations focus on initiatives that represent some of the major variations being tried in this country, spanning a range of local economic conditions and AFDC provisions.

MDRC could not have conducted this multi-year study without the support of The Ford Foundation, which provided funds for planning and for the evaluation activities of the participating states, matching an equal investment of state or other resources. This joint funding is another significant aspect of the demonstration.

Throughout this demonstration MDRC has been gratified by the commitment of the participating states and foundations and their interest in the findings. It is our hope that this demonstration and its results have contributed to informed decision-making and will ultimately lead to even more effective programs, which will increase the self-sufficiency of welfare recipients.

Judith M. Gueron
President

EXECUTIVE SUMMARY

This is the final report on the State of Maine's Training Opportunities in the Private Sector (TOPS) Program. TOPS was a small-scale, voluntary program operated as one among many employment-related options available to recipients of Aid to Families with Dependent Children (AFDC) in Maine's Work Incentive (WIN) Demonstration. Thus, the evaluation focuses on one program alternative, not the WIN Demonstration system as a whole.

TOPS was distinguished from Maine's other WIN Demonstration activities by three program elements. First, it was a prescribed sequence of activities -- pre-vocational training, followed by unpaid work experience, followed by subsidized on-the-job training (OJT), preferably in the private sector. Second, it was intended to reach a harder-to-employ group among the AFDC caseload, as measured by prior welfare dependency and relative lack of work experience, although candidates had to apply for the program and go through additional screening before being judged appropriate to participate. Third, TOPS tended to involve more intensive use of staff time.

In addition to these programmatic differences, TOPS differed from other WIN Demonstration activities in Maine in that it used grant diversion to finance part of the wage subsidies offered to employers who hired participants in the OJT component. Grant diversion is the financial mechanism through which all or part of a public assistance grant is used to finance program services for recipients.

The evaluation compared the experiences of an experimental group which was enrolled in TOPS to those of a control group which did not have access to the TOPS sequence. It found that TOPS produced employment and earnings gains that continued throughout the three year follow-up period. Most of the earnings gains reflected some combination of higher wages or more hours worked, rather than merely increases in the percentage of individuals employed. TOPS did not have an impact on average welfare receipt, however. The combination of earnings gains and no welfare reductions led to substantial increases in the total measured income of TOPS enrollees. But, due largely to the relatively high cost of the program and the absence of welfare savings, TOPS did not pay for itself from the perspective of government budgets within a five year period.

The TOPS Program Design

The Maine WIN Demonstration is called the Welfare Employment, Education and Training Program (WEET). The state's regular WIN program was replaced by WEET in April 1982, following passage of the Federal Omnibus Budget Reconciliation Act (OBRA) in August 1981. OBRA gave states increased flexibility in designing WIN -- the major federally-funded employment and training program for the AFDC population -- and authorized the use of welfare grant diversion.

TOPS was operated as an experimental program within WEET, beginning in October 1983. Program intake ended in December 1984, but TOPS continued into 1986, as enrollees finished their OJT positions. Since December 1984 the TOPS sequence has not been offered as a regular part of WEET, although similar components are available to WEET registrants on an individual

basis.

TOPS was targeted to single heads-of-household who had been on welfare for at least six months, were not employed at enrollment, and applied to participate. The women were subject to further screening by WEET staff who exercised considerable discretion in deciding whether a potential client was "appropriate" for TOPS. Screening included identification of any barriers to participation (such as child care, health or basic literacy problems). In addition, some offices responding to concerns about the level of OJT placements tried to increase the placement rate by applying more rigorous screening criteria regarding motivation and educational attainment.

The three phases of the TOPS sequence worked as follows:

I. Pre-vocational training lasted two to five weeks and stressed personal growth as well as job-seeking and job-holding skills.

II. Work experience consisted of 20-hour per week, unpaid positions in the public or non-profit sector for up to 12 weeks. The intent was to teach good work habits and provide participants with an employer reference. It was offered to participants who completed Phase I but were judged not to be ready for an OJT placement.

III. On-the-job training consisted of placement into subsidized training positions, primarily in the private sector. The training period was a maximum of six months, and the employer subsidy was set at 50 percent of the new employee's wages. Participants who demonstrated their motivation and acquisition of basic work skills became candidates for OJT.

Participants in Phases I and II continued to receive their AFDC grants, were paid training-related allowances, and were eligible for basic education on a limited basis. Enrollees were not supposed to engage in any other education activities.

As noted, a partial funding mechanism for the OJT component in Phase

III was grant diversion. Welfare recipients were placed in regular wage-paying jobs; the amount of AFDC they received, if any, was calculated just as it would have been for any employed AFDC recipient. The difference between the amount of the AFDC grant a recipient had been receiving before going to work and the amount paid to her after she started working was diverted into a wage pool and used to subsidize the OJT positions. WEET staff wanted to experiment with grant diversion because putting AFDC funds into an employment-related activity was regarded as a promising investment, and because it represented a new source of funding in an era of shrinking federal resources.

TOPS was offered in a series of discrete cycles, each consisting of the three components. The start of the pre-vocational training was considered the start of a cycle, and the women who began pre-vocational classes together were treated as a distinct group by staff, even though they moved through the later components in the sequence at varied paces. In all, 30 TOPS cycles were offered at 15 different locations throughout the state.

The intent behind TOPS' carefully sequenced set of activities -- designed to address problems arising from AFDC recipients' low self-esteem as well as their lack of work experience -- was to help the women obtain jobs that paid more than the minimum wage and offered opportunities for advancement. Ultimately, these jobs were expected to enable enrollees to move off welfare entirely. This was a particular concern in Maine where, historically, a relatively large proportion of the caseload worked full time and still received AFDC benefits.

Central WEET staff recognized that their system did not have the

financial resources or the staff capacity to operate the full TOPS sequence. Therefore, they contracted with the state's major training system for the disadvantaged -- authorized under the Job Training Partnership Act (JTPA) -- to provide most of the Phase I and some of the Phase III services and to help underwrite the OJT subsidy.

The Research Design

MDRC's evaluation of TOPS examined the experiences of all female heads-of-household accepted for TOPS throughout the period of its operation. In order to evaluate the impact of TOPS, individuals were randomly assigned to an experimental or a control group. Those in the experimental group were eligible for the full TOPS sequence; the control group was excluded from the specific TOPS sequence but remained eligible for all other WEET services, which included some components similar to those in TOPS.

There is a widespread consensus that random assignment is the most reliable way to measure the effects of a welfare employment program. This is because it ensures that the group receiving the treatment being evaluated is similar to the control group except for the program activities to which they are assigned. Outcomes for the control group serve as a benchmark against which outcomes for the treatment group can be measured. Statistically significant differences in outcomes for the groups during the follow-up period can be confidently attributed to the effects of the treatment itself because the experiences of the control group reflect the extent to which program registrants would have become employed or left welfare in the absence of the treatment. In this study, differences are

considered statistically significant if there is no more than a 10 percent possibility that they could have occurred by chance.

Two other aspects of the research design should be considered in interpreting the TOPS findings. First, the impact results -- i.e., the differences in outcomes for experimentals and controls -- reflect in part the substantial amount of activity by controls in jobs and in employment-related programs. This level of activity was caused by several factors: the research sample consisted exclusively of people who volunteered for TOPS and were not screened out; controls were eligible for all WEET services; the economy in Maine was improving during the demonstration period; and the work incentives embodied in Maine's AFDC benefit structure are greater than in most states.

Second, even though all individuals accepted for TOPS were included in the research sample, the program was small and, therefore, the research sample was also small -- 444 women. Small sample sizes reduce the chance that outcome differences of a given size will be statistically significant.

Evaluation Sample and Data

Of the 444 sample members, 297 clients were randomly assigned to the experimental group and 147 to the control group. Two experimentals were assigned for every control because WEET program operators felt that it was important to serve a large proportion of those recruited. The small sample size reflected problems in stimulating interest in the specific TOPS sequence as opposed to alternative activities, combined with staff selectivity in enrolling clients. It does not reflect lack of interest in receiving services on the part of AFDC recipients in Maine.

Nearly all TOPS sample members were white and over half were divorced or widowed. Half had children under the age of six. In keeping with TOPS program goals, most of the sample members were relatively long-term AFDC recipients -- 63 percent had been receiving AFDC for more than two years -- and only one-third had recent employment experience. However, due to the additional screening criteria developed by local staff, sample members were relatively well educated: 75 percent had received a high school diploma or GED by the point of random assignment.

In addition to their high level of education, the fact that 61 percent of the TOPS sample members were not required to register for employment services with WEET (mostly because they had young children) but did so anyway suggests that they were a highly motivated group with few barriers to participation. Thus, although these women would be characterized as harder-to-employ in terms of their welfare histories and limited recent employment experience, there are indications that the program concentrated on a segment within this group with somewhat more favorable employment prospects. In addition, a number of factors -- the high percentage of sample members who were divorced or widowed, the presence of pre-school children, the relatively high level of educational attainment and the absence of employment history -- suggest that the women in the TOPS sample may represent a displaced homemaker population, that is, women who discontinued or postponed working for marriage and family and then experienced hard times.

Evaluation data on the research sample came from several sources. Client characteristics data came from Client Information Sheets filled out by WEET staff at random assignment. Data on TOPS program participation

came from the WEET information system which, for non-TOPS activities, was supplemented by the JTPA information system. Follow-up data on earnings and AFDC payments came from the state's Unemployment Insurance system and AFDC payments system, respectively. Qualitative information, mainly interviews with program staff, was used to augment the quantitative data.

Findings On Participation and Program Implementation

- **Program scale in TOPS remained small and fell below the level anticipated.**

A total of 297 experimentals were enrolled in TOPS over the 15-month intake period, well below the enrollment target. This compares with a WEET caseload of 3,157 registrants shortly before the start of the TOPS demonstration and a Maine AFDC caseload of 16,556 heads-of-household in January 1983. Both the small absolute scale of the program and the failure to reach the anticipated level were typical of other grant diversion OJT programs studied by MDRC. This suggests that OJT programs funded with grant diversion are likely to remain only a limited part of a broad-based welfare reform strategy.

- **Approximately 90 percent of the TOPS experimentals participated in at least one of the three TOPS components. Participation was highest in the pre-vocational training and lowest in OJT; the most frequent combination of services was pre-vocational training followed by work experience.**

Due at least in part to the voluntary nature of TOPS and the screening which excluded applicants with potential barriers to participation, a high percentage of experimentals participated in employment-related activities. As would be expected in a sequential program, participation was highest in the first activity in the sequence, and declined in each subsequent compon-

ent, as enrollees encountered practical problems, found employment, went off AFDC, lost interest in the program, decided to pursue other training activities, or were found inappropriate for subsequent components. Even so, nearly 70 percent of the experimentals participated in at least two TOPS components and about 30 percent participated in OJT in combination with another activity. In addition, 32 percent were active in job search, although this was not part of the program design, and a small proportion of experimentals participated in other education and training activities. Only two experimentals were sanctioned for noncompliance.

- **Just over half of the control group also participated in employment activities, which typically were less intensive than the combination of TOPS services received by the experimental group.**

Since members of the control group were eligible for other services and were to be treated like other WEET clients, WEET staff worked actively with them. This included identifying and arranging appropriate services, referring them to education or training activities available through other vendors, and providing support services. About a quarter of the controls participated in job search, and a quarter were active in education or training. Although a substantial proportion -- almost a quarter -- did participate in TOPS-like pre-vocational training, work experience or OJT, none got the sequential approach or all three of the activities that defined TOPS. Nor were the activities engaged in by controls as intensive, on average, as those in the TOPS sequence.

- **The total estimated cost of the TOPS program came to $2,627 per experimental. However, because controls received some services, the <u>net</u> cost of all employment and training services was $2,244 per experimental.**

This was the highest estimated net cost among the welfare employment

programs MDRC has recently evaluated. The cost of TOPS itself -- $2,627 per experimental -- represents $2,933 per person who participated in the program. The cost includes program operating expenditures ($1,613 per experimental), as well as allowances, support services and wage subsidies ($1,014 per experimental). In addition, experimentals received non-TOPS services from WEET, JTPA and other providers that cost an estimated $134 per experimental. The control group, on the other hand, received $517 worth of services, on average.

- **The TOPS sequence depended on interagency coordination between Maine's WEET and JTPA systems. Despite improvements over time, differences in philosophy and problems in communication complicated program implementation.**

In Maine, WEET and JTPA staff had quite different philosophies about whether and how to work with AFDC recipients. These differences were exacerbated by initially poor communication channels between the two systems. Maine's experience suggests that several items are important to interagency coordination in a multi-component sequence of activities: involvement at the outset by local as well as central staff from both agencies; designation of a liaison in each local office; joint staff training; regular opportunities for case-management reviews with staff from both agencies; and continued attention from top staff in both agencies. Implementation of TOPS was also complicated by the disjuncture between the prescriptiveness of the TOPS sequence and the greater flexibility afforded staff within regular WEET to tailor services to individual circumstances.

- **Much of the job development for OJT positions was done by the TOPS participants themselves, applying lessons learned in the pre-vocational phase of their training.**

Both JTPA and WEET staff came to rely heavily on client job search as

a source of OJT positions, although this had not been envisioned in planning the demonstration. During some of the TOPS cycles, participants were placed in regular job clubs; in others, they engaged in independent job search under the supervision of job development staff. (Some enrollees got unsubsidized jobs through this method.) Only the most promising OJT candidates were referred directly to employers in the staff's pool of available positions; on the whole, there was little individualized job development. Rollover from the work experience positions was another source of OJT positions.

- **The OJT positions met the program goal of paying a starting wage of $4.00 per hour, on average. The majority of the OJT positions rolled over into unsubsidized employment with the same employer.**

On average, the OJT positions paid $4.04 per hour to start; one-third paid more than $4.00, and two-thirds paid $4.00 or less. Over 70 percent were in clerical or service positions -- occupations defined as "typically female" and with correspondingly low wage levels. Despite the emphasis on private sector placements, just over one-quarter of the OJT contracts were written with non-profit employers or public agencies. A review of the job descriptions in the OJT contracts suggests that most offered only limited training potential.

The average scheduled length of the OJT positions was 19 weeks; 37 percent were scheduled for the maximum length of six months. State-reported data show that 69 out of 89 OJT participants completed the number of training hours called for in their contract; 63 continued in unsubsidized employment with the same employer. Situational problems and dissatisfaction with the position were common reasons for failure to

complete an OJT; only a few clients were fired by the employers.

- **In general, the grant diversion process operated well. However, funds diverted from AFDC grants covered only about half of the OJT wage subsidy, less than the 70 percent anticipated.**

Despite some problems in synchronizing the timing of the diversion of AFDC funds into the wage pool with changes in OJT participants' AFDC grants, the grant diversion process generally worked smoothly in TOPS. The experience suggests that careful monitoring is critical; that it would be difficult to operate a grant diversion program on a large scale if a combination of automated and manual record-keeping is required; and that the actual amount of funds available through grant diversion is difficult to predict in advance. It may therefore be necessary to have additional sources of revenue available to cover any short-falls in the wage pool.

- **The TOPS experience suggests that the OJT subsidy may have been more of a hiring bonus for employers than compensation for higher training costs or lower productivity.**

A combination of factors -- especially that the OJT positions seemed to offer little training beyond that given to any new employee, and that employers found the OJT hires to be about as productive as other new hires -- suggests that the OJT subsidy was not necessary to compensate for any added training costs or reduced productivity. It does not follow, however, that an OJT is inappropriate even if employers benefit financially. The added cost of the subsidy might be worthwhile if it accelerates the speed with which AFDC recipients are placed in jobs, or leads to better jobs than would otherwise have been available to them.

Findings on Program Impacts

The impact findings described below should be interpreted in light of the following key points. First, the discussion occasionally refers to the "in-program" and "post-program" periods. The former refers to the first six quarters of follow-up after random assignment, when a substantial percentage of experimentals were in a TOPS component; the latter period begins with the seventh quarter of follow-up, when only six percent of experimentals were still in OJT positions. Second, the findings reflect the impact of the mix of services experimentals received, and do not measure the separate effect of OJT. Third, the earnings for experimentals include wages paid in subsidized OJT positions; however, the subsidized wages did not have any material effect on experimentals' earnings after quarter 6. And finally, the AFDC expenditures for experimentals reflect only the payments made directly to individual recipients; the amounts diverted into the wage pool are, however, taken into account as part of the benefit-cost analysis discussed later.

- **TOPS achieved sustained earnings increases over the 11-quarter follow-up period.**

Over the full follow-up period (quarters 2 through 11), TOPS increased earnings on average by $1,745 per experimental, over and above the control group average of $5,599. (See Table 1 and top panel of Figure 1.) During the in-program period (through quarter 6), earnings of experimentals averaged $2,855 and earnings of controls averaged $2,300, yielding a positive but not statistically significant difference of $555. During the post-program period (quarters 7 through 11), TOPS increased average earnings by a statistically significant $1,190 per experimental, over and

above the control group average of $3,298.

- **Experimentals were employed for more follow-up quarters than controls, and more experimentals than controls were employed in each quarter except the first two. Most of these differences were not statistically significant, probably because of small sample sizes.**

Beginning with the third quarter, experimentals had consistently higher rates of employment than controls, with the differences ranging from 1.1 to 11.1 percentage points. (See Table 1.) For the full follow-up period, experimentals were employed on average for 4.69 quarters versus 4.21 quarters for controls, yielding a not statistically significant difference of almost half of a quarter.

- **Three-quarters of the overall earnings impact in the post-program period was due to increased wage rates or hours worked for those who were employed, rather than to a higher proportion of experimentals who were ever employed.**

Over the full follow-up period, only 7 percent of the earnings impact was due to increased rates of employment, and 19 percent to an increase in the number of quarters with employment for those who were ever employed. Nearly 75 percent of the earnings impact, therefore, was due to increased earnings of experimentals in the quarters in which they were employed. This reflected some combination of higher wages per hour, more hours per week, or more weeks worked per quarter. However, the data do not permit an estimation of the relative importance of these three factors.

- **TOPS did not reduce welfare receipt over the full follow-up period, the in-program program period or the post-program period.**

In most quarters, slightly more experimentals than controls received welfare, although the differences were never statistically significant. (See Table 2 and bottom panel of Figure 1.) Over the full follow-up

TABLE 1

MAINE

IMPACTS OF THE TOPS PROGRAM ON EMPLOYMENT AND EARNINGS

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Ever Employed			
Quarters 2-11[a]	81.8%	80.2%	1.6%
Quarters 2-6[a]	71.2	65.6	5.6
Quarters 7-11	68.7	65.3	3.4
Ever Employed			
Quarter of Random Assignment	18.4	24.7	-8.2**
Quarter 2	23.5	34.8	-11.3**
Quarter 3	42.8	39.3	3.5
Quarter 4	52.1	43.8	8.3
Quarter 5	49.9	41.3	8.6*
Quarter 6	47.9	40.7	7.2
Quarter 7	50.4	45.0	5.4
Quarter 8	50.2	43.4	6.9
Quarter 9	50.6	43.4	7.1
Quarter 10	50.7	39.7	11.1**
Quarter 11	50.4	49.3	1.1
Average Total Earnings			
Quarters 2-11[a]	$7344.00	$5599.17	$1744.83**
Quarters 2-6[a]	2855.39	2300.89	554.50
Quarters 7-11	4488.61	3298.28	1190.33**
Average Total Earnings			
Quarter of Random Assignment	70.97	108.74	-37.78
Quarter 2	172.65	288.52	-115.87**
Quarter 3	535.12	436.18	98.94
Quarter 4	686.94	528.54	158.40*
Quarter 5	715.91	475.37	240.54**
Quarter 6	744.78	572.28	172.50*
Quarter 7	839.99	601.23	238.76**
Quarter 8	881.97	662.55	219.42**
Quarter 9	917.52	668.60	248.92**
Quarter 10	915.73	641.63	274.10**
Quarter 11	933.40	724.28	209.13*

NOTES: These calculations include zero values for sample members not employed. There may be some discrepancies in sums and differences due to rounding.

A two-tailed t-test was applied to each difference between experimental and control groups. Statistical significance levels are indicated as follows: * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Quarter 1, the quarter of random assignment, may contain some income from the period prior to random assignment and is therefore excluded from cumulative outcomes.

TABLE 2

MAINE

IMPACTS OF THE TOPS PROGRAM ON AFDC RECEIPT

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Ever Received AFDC			
Quarters 2-11[a]	98.3%	98.0%	0.3%
Quarters 2-6[a]	98.3	98.0	0.3
Quarters 7-11	73.3	71.6	1.8
Ever Received AFDC			
Quarter of Random Assignment	98.6	99.4	-0.7
Quarter 2	97.6	98.0	-0.4
Quarter 3	89.9	89.8	0.0
Quarter 4	81.8	85.1	-3.3
Quarter 5	77.3	77.1	0.2
Quarter 6	73.8	71.4	2.4
Quarter 7	70.0	68.7	1.3
Quarter 8	64.4	63.1	1.3
Quarter 9	62.8	60.2	2.5
Quarter 10	58.9	52.5	6.4
Quarter 11	55.8	49.8	6.0
Average Total AFDC Payments			
Quarters 2-11[a]	$6768.45	$6598.52	$169.93
Quarters 2-6[a]	3870.62	3750.36	120.26
Quarters 7-11	2897.84	2848.16	49.67
Average AFDC Payments			
Quarter of Random Assignment	924.25	941.22	-16.97
Quarter 2	918.20	886.79	31.41
Quarter 3	834.50	798.73	35.77
Quarter 4	741.90	728.16	13.74
Quarter 5	694.64	686.92	7.72
Quarter 6	681.38	649.76	31.62
Quarter 7	636.64	636.23	0.41
Quarter 8	595.98	607.13	-11.15
Quarter 9	578.21	582.83	-4.62
Quarter 10	561.67	516.42	45.25
Quarter 11	525.34	505.55	19.79

NOTES: These calculations include zero values for sample members not receiving AFDC. There may be some discrepancies in sums and differences due to rounding.

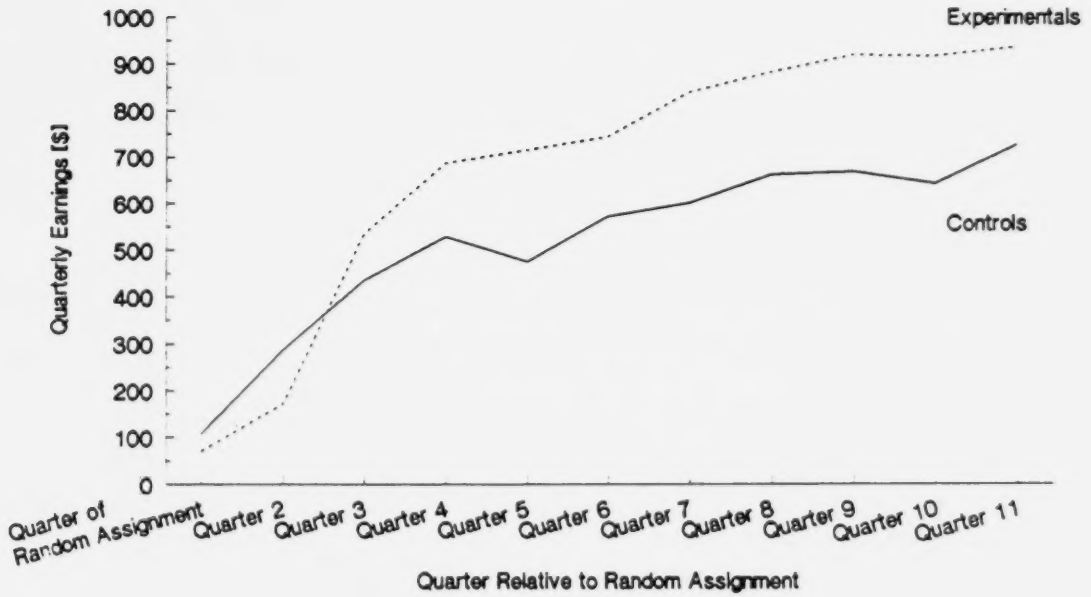
A two-tailed t-test was applied to each difference between experimental and control groups. Statistical significance levels are indicated as follows: * =10 percent; ** = 5 percent; *** = 1 percent.

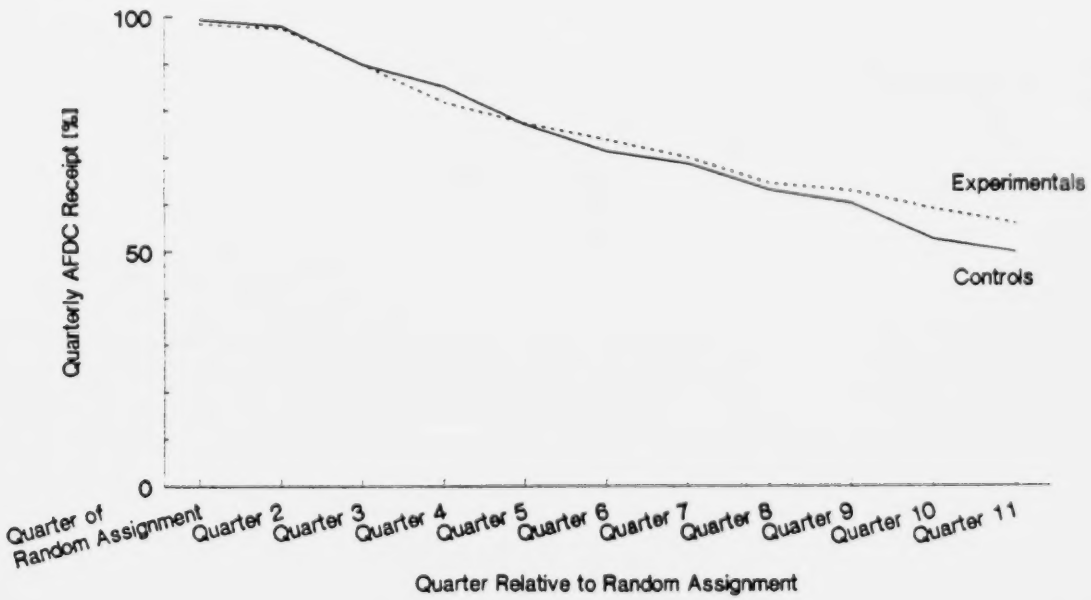
[a]Quarter 1, the quarter of random assignment, may contain some income from the period prior to random assignment and is therefore excluded from cumulative outcomes.

FIGURE 1

MAINE

TRENDS IN EARNINGS AND AFDC RECEIPT, BY RESEARCH GROUP





period, 98.3 percent of experimentals received welfare at some point, versus 98.0 percent of controls. The number of months on welfare averaged 19.6 for experimentals, versus 19.2 for controls. Total AFDC income over the period averaged $6,768 for experimentals, versus $6,598 for controls, yielding a not statistically significant increase of $170.

There is no obvious explanation for the lack of impact on welfare receipt, given the consistent earnings impacts. Scrutiny of the AFDC data indicated that systematic errors in grant calculations were not the answer. Three factors seem plausible. First, Maine's AFDC program allows earnings up to 27.5 percent of the standard of need to be excluded from the grant calculation as a work incentive feature. Any TOPS impacts in this earnings range would not have reduced welfare. Second, any impact for experimentals above the point where earnings were already sufficient to remove them from the welfare rolls could not generate any further AFDC savings. Third, the pre-vocational component of TOPS included discussions of how going to work would affect participants' AFDC grant, and how they could best be their own advocates within the system. This could have led experimentals to be more effective than controls in making sure their grants were not affected inappropriately.

- **TOPS led to statistically significant increases in total measured income over the full follow-up period, the in-program period and the post-program period.**

Over the full follow-up period, TOPS increased measured income (i.e., earnings plus AFDC payments) per experimental by $1,915, on a control group average of $12,198. During the in-program period the increase was $675, on a control group average of $6,051. During the post-program period, the increase was $1,240, on a control group average of $6,146. Total measured

income per experimental increased significantly in every quarter except the first two (when controls temporarily had higher earnings than experimentals, many of whom were in the pre-OJT components of the TOPS sequence). As earnings increased and AFDC income held roughly constant, earnings grew as a proportion of total income.

Findings from the Benefit-Cost Analysis

The benefit-cost findings measure the overall gains and losses generated by TOPS. It is important to remember that these estimates, like the impact estimates, present the net benefit-cost picture for TOPS compared to the benefits and costs of the substantial employment-related activities engaged in by controls.

This analysis extends the impact results in several important ways. First, it includes not only the program's impacts on earnings and welfare payments, but also the effects on fringe benefits, tax payments, Medicaid, Food Stamps and the administrative costs associated with these transfer programs. These effects, which could not be measured directly, are imputed from observed earnings, welfare effects and other information.

Second, using a number of assumptions, the analysis projects program benefits and costs that are likely to occur after the end of data collection. This longer-range view is necessary because most costs are incurred early, when participants are still active in the program, whereas benefits can be expected to accrue over a longer time period as individuals continue to work and pay taxes. The benefit-cost estimates, thus, extend over a five-year period for each sample member, starting with the date of random assignment, and include both observed and projected effects.

Third, the benefit-cost analysis is concerned with how gains and losses differ depending on the perspective of different groups in society. Several questions are addressed. For example, do members of the experimental group become financially better off as a result of TOPS; and do government budgets show net gains or losses due to the program?

It is important to recognize that while this analysis is comprehensive, it cannot take into account all factors that are potentially important in interpreting benefit-cost results. For example, it does not include the possible displacement of other workers by any increased employment of experimentals, or the intangible benefits associated with society's preference for work over welfare.

- **Over a five-year period, TOPS enrollees benefited by an average of more than $3,000 per experimental.**

As shown in the top panel of Table 3, the estimated net present value of TOPS to the welfare recipients who enrolled in it was $3,182 per experimental. This reflects steady gains in earnings and fringe benefits -- from both OJT and regular jobs -- which were offset somewhat by taxes, but not by reductions in transfer payments. Indeed, estimated AFDC and Medicaid payments actually increased, although Food Stamps and Unemployment Compensation dropped. Varying the assumptions underlying the projected part of this estimate alters the size of the gain somewhat, but even the lowest bound estimate yields a substantial gain.

- **Government budgets showed a net loss from TOPS of $1,129 per experimental.**

The estimated effects of TOPS on state and federal budgets are presented in the bottom panel of Table 3. The key item, of course, is the cost of the program, which was more than $2,600 per experimental. This was

TABLE 3

MAINE

ESTIMATED GAINS AND LOSSES PER EXPERIMENTAL AFTER FIVE YEARS, FROM THE PERSPECTIVES OF WELFARE RECIPIENTS AND GOVERNMENT BUDGETS

Component of Analysis and Perspective	Estimate
Welfare Recipients	
Gains	
Earnings and Fringe Benefits	$ 3493
TOPS Allowances and Support Services	650
AFDC Payments	472
Losses	
Tax Payments	-753
Non-AFDC Transfer Payments	-562
Non-TOPS Allowances and Support Services	-119
Net Present Value	3182
Government Budgets	
Gains	
Tax Payments	$ 1017
Non-AFDC Transfer Payments and Administration	639
Use of Non-TOPS Programs	302
Losses	
AFDC Payments and Administration	-498
TOPS Operating Costs	-1643
TOPS Allowances, Support Services and Wage Subsidies	-944
Net Present Value	- 1129

SOURCE: See Table 6.10

NOTES: All benefits and costs are estimated for a five-year time horizon beginning at application, and are expressed in 1985 dollars. Because of rounding, detail may not sum to totals. Results include estimates of projected program effects beyond the observation period. The net present value is the sum of all gains and losses.

partly offset by the substantial use of non-TOPS education and training services by the controls, which lowered the TOPS net budgetary investment to some degree. The program generated a substantial increase in tax payments because of its sustained earnings impact, but no net savings in transfer payments. A net budgetary loss resulted for the five-year period covered by the analysis. Varying the assumptions underlying the projection again alters the size of the estimate but even the highest bound estimate yields a loss.

- **The net value of TOPS to society as a whole was $2,990 per experimental, and reflects substantial redistribution of resources.**

In addition to these effects on enrollees and government budgets, the program furnished gains to private employers (through the OJT subsidy) and community agencies (because of the labor services provided in the work experience assignment). Taking into account the large gain for enrollees, the loss to government budgets, and gains for employers and community agencies, TOPS produced an overall social gain of almost $3,000 per experimental. Underlying this large net benefit to society is a significant redistribution of resources, most notably to a segment of the welfare caseload. Indeed, these results suggest that, in terms of redistribution -- one of several program goals -- TOPS can be viewed as a much more efficient means of transferring income to the AFDC group it targeted than simply raising their AFDC benefits: A net budgetary cost of about $1,100 produced an income gain of almost three times that amount and benefited employers as well.

* * * * * * *

As a voluntary, intensive and relatively expensive intervention, TOPS differed from most of the other welfare employment initiatives evaluated by MDRC since 1981. Any comparisons between the TOPS findings and those from other states require great care, however, for a number of reasons.

In particular, TOPS was a small-scale program restricted to recipients who had been on AFDC for at least six months, had limited recent employment and were not screened out; unlike the other state initiatives studied, TOPS was not intended to serve a broad section of the WIN caseload. In part because of the voluntary nature of the program and the screening that occurred, the percentage of people in the experimental group who participated in the program was far higher in TOPS than in the other programs studied. The impacts in MDRC's studies are averaged over all members of the research sample, including both participants and non-participants. Since the TOPS impacts are spread over fewer non-participants, it might be expected that estimated impacts would be larger than in MDRC's other evaluations. Cross-state comparisons are further complicated by variations among states in economic conditions and welfare benefit structures, factors which can have a strong influence on the nature of the AFDC caseload and the outcomes for both experimentals and controls.

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MAINE:
FINAL REPORT ON THE TRAINING OPPORTUNITIES IN THE PRIVATE SECTOR PROGRAM

CHAPTER I

INTRODUCTION

This is the second and final report on the State of Maine's Training Opportunities in the Private Sector (TOPS) Program. TOPS was operated as one option among an array of employment-related activities available to recipients of Aid to Families with Dependent Children (AFDC) through Maine's Work Incentive (WIN) Demonstration system. Thus, the evaluation concerns a particular program alternative, in which enrollment was voluntary, rather than the entire Maine WIN Demonstration system.

Maine's WIN Demonstration is called the Welfare Employment, Education and Training Program, or WEET. The WEET initiative became possible through the federal Omnibus Budget Reconciliation Act of 1981 (OBRA), which allowed states to reorganize the Work Incentive program, the major federally-funded employment program for AFDC recipients.

TOPS was distinguished from other WEET activities by three program elements. First, it was a prescribed sequence of activities -- pre-vocational training, followed by unpaid work experience, followed by on-the-job training (OJT) in a subsidized position, preferably in the private sector. Second, it was intended to reach a harder-to-employ group among the AFDC caseload, as measured by prior welfare dependency and relative lack of work experience, although candidates had to apply and go through additional screening before being judged appropriate to participate. Third, TOPS tended to involve more intensive use of staff time than other WEET program activities.

In addition to these programmatic differences, TOPS differed from WEET in that it used grant diversion to finance part of the wage subsidies offered to employers who hired TOPS participants in the OJT component. Grant diversion is the financial mechanism through which all or part of a public assistance grant is used to finance program services for recipients as opposed to payments made directly to participants. Authorization for states to use grant diversion to fund OJT programs for AFDC recipients was included in OBRA.

TOPS was operated as an experimental program, beginning in October 1983, by the Division of Welfare Employment, Maine Department of Human Services.* The prescribed sequence was available statewide, at different times at different locations. Program intake ended in December 1984, although the operational phase continued into 1986, as enrollees finished their OJT positions. Since December 1984, the TOPS sequence has not been offered as a regular part of WEET, but similar components are available to WEET registrants on an individual basis.

Research on TOPS was conducted by the Manpower Demonstration Research Corporation as part of its 11-state Demonstration of State Work/Welfare Initiatives. An earlier study of TOPS, published by MDRC in June 1985, reported on the implementation of the program through September 1984.[1] This report examines the implementation experience of the whole demonstra-

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* In December 1987, the Division of Welfare Employment became the Division of Family Independence within the Bureau of Income Maintenance, Department of Human Services.

tion period. It also analyzes the impacts and cost-effectiveness of the TOPS sequence.

I. Goals and Intentions

TOPS grew out of work initiated by a committee appointed in late 1980 by the Commissioner of Human Services to develop recommendations for improving Maine's employment and training services for AFDC recipients.[2] In addition to the grant diversion option, the passage of OBRA offered states increased flexibility in the administration and content of welfare employment programs. This provided the opportunity for the state to implement many of the committee's recommendations in the WEET program, which replaced Maine's regular WIN program in April 1982. Plans for operating TOPS as an experimental program within WEET began in the late spring of 1982.

The Division of Welfare Employment had multiple goals in mounting the TOPS demonstration. First, officials wanted to work with a subset of the AFDC caseload which they felt had traditionally been underserved in Maine's training programs -- women with long-term welfare dependence and sporadic work histories. Second, they wanted to move these women into jobs that paid better than the minimum wage and offered opportunities for advancement. The assumption was that the prescribed combination of services, designed to address problems arising from AFDC recipients' low self-esteem as well as their lack of work experience, would help the women to obtain higher-paying jobs enabling them to become less dependent on welfare. This was of particular concern in Maine where, historically, a relatively large proportion of the caseload worked but continued to receive benefits.[3] Although it was anticipated that welfare savings would result, reductions

in welfare payments were not the primary goal. Staff were more interested in improving women's economic status by helping them obtain better-paying jobs. Third, staff wanted to experiment with grant diversion. They considered it a potentially more productive use of resources than direct cash payments. They also viewed it as a new source of funding in an era of shrinking federal appropriations. Instead of coming out of general WEET funds, the employer subsidy in TOPS OJT positions could be covered in part by funds available for AFDC benefit payments.

II. Key Features of the TOPS Program Model

This section describes the key features of TOPS in more detail.

A. Eligibility Criteria

To be considered for TOPS, AFDC recipients had to apply. Not everyone who applied, however, was accepted. The targeting strategy used in TOPS combined two different aproaches that were somewhat contradictory in intent.

On the one hand, guidelines reflected the interest in working with the harder-to-employ by specifying objective eligibility based on length of time on welfare and employment status. TOPS enrollment was limited to single heads-of-household who had been receiving AFDC for six consecutive months, and who were not employed at the time of enrollment. On the other hand, staff were supposed to screen out eligible women who had child-care, transportation, health or other problems that could interfere with their participation, as well as women who were unable to read at the level of the materials used in the pre-vocational training classes. In practice, staff developed additional, informal screening criteria and sought to enroll

eligibles who could demonstrate high motivation, had a high school diploma or GED, and whose job goals were commensurate with their current skills. These screening efforts in fact worked against the goal of targeting the program to the harder-to-employ.

In addition, recruitment efforts frequently focused on women who were exempt from the WIN registration requirement because they had children under the age of six or lived outside a mandatory service area. As a result, 61 percent of the research sample was composed of WIN-exempt women not necessarily typical of the WIN caseload.

B. The TOPS Sequence

The TOPS sequence had three phases, to be undertaken in the following order:

1. Phase I: Pre-vocational Training

The pre-vocational training component lasted two to five weeks and stressed personal growth as well as the development of job-seeking and job-holding skills. Goal-setting and decision-making, household budgeting, and balancing the demands of family and work were also addressed. Emphasis was placed on career exploration; fostering good work habits and attitudes such as dependability, punctuality and responsibility; and teaching the mechanics of filling out resumes, conducting a self-directed job search and improving interviewing skills. Participants continued to receive their AFDC grants while taking part in this activity and were paid an allowance of $1.25 per hour to cover training-related expenses. Basic education was also available, on a limited basis, for clients who sought it or were thought to need it during Phase I and Phase II.

2. Phase II: Work Experience

At the end of Phase I, participants were reassessed to determine whether they needed further training or were ready for OJT positions in the private sector. Participants who required additional assistance were placed in a 20-hour per week, unpaid work experience position in the public or non-profit sector, for up to 12 weeks.[4] These work experience assignments were intended to teach or reinforce good work habits, and to provide participants with an employer reference. Participants continued to receive their grants, were paid for training-related expenses, and were eligible for basic education.

3. Phase III: On-the-Job Training

TOPS participants who demonstrated their motivation and acquisition of basic work skills became candidates for placement into on-the-job training (OJT) positions, preferably in the private sector. In an OJT program, employers receive a subsidy for part of the wages paid to a new worker during a specified training period, and are expected to retain the worker as a permanent employee at the end of that period. One rationale for an OJT subsidy is that it encourages employers to hire workers who would otherwise have difficulty obtaining such jobs. Another is that the subsidy compensates employers for lower productivity during the training period or is a reimbursement for the training provided. In TOPS, the training period was limited to a maximum of six months and the employer subsidy was set at 50 percent of the new employee's wages.

The WEET staff who designed TOPS assumed that not all participants would need unpaid work experience before obtaining an OJT position; the design thus allowed clients who were judged to be "job ready" after pre-

vocational training to move directly from Phase I to Phase III. These two phases were considered the primary components of the intervention strategy. In actuality, however, a higher proportion of enrollees participated in Phases I and II than in any other combination of components.

C. Grant Diversion: The Funding Mechanism for OJT

In TOPS, as noted, the employer subsidy in the OJT phase was funded in part through the use of grant diversion. The mechanism for grant diversion worked as follows: As in any OJT program, TOPS participants were placed in jobs with employers who had been promised a wage subsidy. As federal regulations require, a portion of the recipients' wages was counted as income that served to reduce the amount of the recipients' welfare grant. Normally, the amount by which the grant is reduced would be an immediate savings of public expenditures; under grant diversion, this amount is not saved, at least in the short run. It is deposited into a pool of funds along with the grant amounts diverted for the other OJT participants. Wage subsidy payments to employers are then made from the pool as required by the OJT placements. The advantage of using a pool to finance the subsidies is that the amount an employer receives does not have to be linked directly to an individual grant.

Grant diversion is intended to be an investment. Budget savings from the reduction in the welfare grant are foregone in the short-term in favor of investment in wage subsidies that are expected to provide AFDC recipients with direct access to stable employment, particularly in higher-paying jobs in the primary labor market. The implicit assumption is that there will be long-run savings as participants become more economically self-sufficient and remain off welfare.

It should be stressed that grant diversion was merely one of the funding mechanisms for the OJT component of TOPS; the program treatment that is being tested in the demonstration is the three-component sequence that constitutes TOPS. Under grant diversion, the dollar amount of the grant paid directly to recipients was lowered during the OJT employment in exactly the same way as it would be for any recipient who works. But, because the amount by which the grant is reduced is used to offset the OJT cost, it cannot, by definition, generate welfare savings during the program period.

III. Overview of Program Administration

Since the TOPS demonstration was implemented as one option among a comprehensive array of services available through WEET, it is important to understand the WEET system of which it was a part. It is also important to understand the interagency coordination necessary to staff and implement the full TOPS sequence.

A. Maine's WIN Demonstration Program

The WEET program replaced regular WIN in Maine in April 1982; the change, which followed a 30 percent reduction in federal funding, occasioned a major administrative reorganization and a reorientation of program services. The regular WIN program had been operated jointly by the Maine Employment Service and the Separate Administrative Unit within the Department of Human Services. WEET, in contrast, was administered solely by the Division of Welfare Employment, a newly-created office within the Department of Human Services. Faced with the reduction in federal funding -- which was only partially offset by additional state monies -- the

central WEET staff closed two out of the seven WIN regional offices in the state, scaled back the areas where AFDC recipients were required to register for employment services, and eliminated over half the WIN staff positions. The WEET offices were staffed with a combination of former Employment Service and Separate Administrative Unit staff, now located in the same offices for the first time.

The transition from WIN to WEET also signalled a change in administrative styles and service priorities. WIN utilized specialized positions in such areas as assessment, job placement and support services, while WEET workers are expected to be generalists with case-management responsibility for all aspects of registrants' needs. In contrast with WIN's emphasis on quick placements, WEET places a premium on providing opportunities for longer-term education and training and more support services. WEET staff provide few direct services other than assessment, the preparation of employability development plans and job search activities. In addition, they are expected to inform clients about other programs and services available throughout the community, make referrals or direct arrangements for such services, and oversee the clients' progress.

Statistics on WEET registrants' activities during the TOPS demonstration period indicate the kinds of alternative services that would be available to WEET enrollees in the absence of TOPS. They also reveal the relative importance of education and training in the menu of WEET-funded activities. As of September 30, 1983 -- a few weeks before the start of the TOPS demonstration -- WEET had a caseload of 3,157 heads-of-household. Of these, 700 women were enrolled in training or education programs; and 334 were in job search activities. Over the course of the next year,

4,146 WEET registrants went through assessment, 1,611 participated in training or education activities, and 703 were active in job search or job development.[5]

B. Interagency Coordination

Central WEET staff recognized that the system had neither the financial resources nor the staff capacity to operate the full TOPS sequence. Therefore, they contracted with the state's major training system for the disadvantaged -- authorized under the Job Training Partnership Act (JTPA) -- to provide most of the Phase I and some of the Phase III services and to help underwrite the OJT subsidy cost. The following division of labor applied to most areas in the state: WEET staff were responsible for recruiting and screening all prospective TOPS enrollees; JTPA staff operated the pre-vocational training workshops; WEET was in charge of developing and monitoring the work experience positions; JTPA, either alone or in conjunction with WEET, was responsible for developing and placing participants in OJT positions. (For details, see Table 1.1.) Financial agreements specified that WEET would pay 70 percent, and JTPA 30 percent, of the wage subsidy provided to the OJT employers. Only the WEET share was funded through grant diversion.

Between October 1982 when the Job Training Partnership Act was passed, and October 1983 when it replaced the Comprehensive Employment and Training Act, Maine's employment and training system for the disadvantaged went through a restructuring similar to that experienced in the welfare employment system. In the JTPA system, as in WEET, funding was reduced, administrative positions were reorganized, staff positions were eliminated or restructured, and specialist functions were transformed into generalist

TABLE 1.1

MAINE

WEET AND JTPA AGENCY CONTRACTUAL AGREEMENTS
FOR TOPS SERVICES, BY WEET REGION

WEET Region	TOPS Site/WEET Office	JTPA Service Provider[b]	WEET/JTPA Contractual Agreement
I	Portland[a]	Training Resource Center	Displaced Homemakers did recruitment and assessment, Pre-Vocational Training, and Work Experience. WEET and TRC shared OJT development
	Biddeford	Maine Department of Labor	15-county arrangement[d]
II	Lewiston[a]	Mountain Valley Training	15-county arrangement
	Norway	Mountain Valley Training	15-county arrangement
III	Augusta[a]	Maine Department of Labor	15-county arrangement
	Bath	Coastal Economic Development Corporation	WEET did recruitment, JTPA did final assessment and provided all other TOPS services
	Damariscotta	Coastal Economic Development Corporation	Same contract as Bath
	Skowhegan	Maine Department or Labor	15-county arrangement
	Waterville	Maine Department of Labor	15-county arrangement
IV	Bangor[a]	Training Development Corporation	15-county arrangement, except WEET and TDC shared OJT development
	Ellsworth	Training Development Corporation	Same contract as Bangor
	Machias	Maine Department of Labor	15-county arrangement
V	Presque Isle[a]	Aroostook County Action Program	15-county arrangement, except WEET provided Pre-Vocational Training
	Caribou	Aroostook County Action Program	Same contract as Presque Isle
	Houlton	Aroostook County Action Program	Same contract as Presque Isle

SOURCE: MDRC interviews with TOPS program staff and WEET/JTPA contracts.

NOTES: [a]Indicates WEET regional office.

[b]During the operational phase of the TOPS demonstration there were two Service Delivery Areas (SDAs) in Maine. In the Cumberland County SDA, the Training Resource Center served as both the grant recipient and the service provider. The Maine Department of Labor, Bureau of Employment and Training, administered JTPA programs in the 15-county SDA. In three counties, the Department provided JTPA services directly; in the rest of the SDA, it subcontracted service delivery with a variety of service provider agencies.

[c]In the November 1983 cycle only, WEET staff did the recruitment and assessment.

[d]In the 15-county arrangement, WEET did recruitment, assessment, and Work Experience; JTPA provided Pre-Vocational Training and OJT development.

roles. The repercussions of these changes were still being felt when the TOPS demonstration began.

C. The Discontinuation of TOPS

Intake for the TOPS demonstration ended in December 1984. Since then, the Division of Welfare Employment has not offered the TOPS components as a sequenced program. WEET continues to place individuals in pre-employment training offered by JTPA or other providers, but this is not required to be in combination with the other components that made up TOPS, and the WEET registrants are mainstreamed with non-AFDC recipients. Work experience and OJT positions are also available through WEET without being part of a prescribed sequence, and OJT continues to be funded through grant diversion. Coordination efforts with JTPA have continued, but on a largely informal rather than contractual basis.

The Division of Welfare Employment discontinued the TOPS sequence after the special funding from the federal Office of Family Assistance (OFA) ran out. In addition to the funding constraints, the decision not to institutionalize TOPS reflects opposition to the demonstration among some local staff who objected to the prescriptive nature of the program model, argued that it was too time-consuming and costly to implement, and doubted that it was more effective than other WEET services.

IV. The Evaluation Design: An Overview

MDRC's evaluation of TOPS examines the experiences of 444 female heads-of-household enrolled in the research sample between October 1983 and December 1984.

The evaluation uses a random assignment experimental design, the most

powerful methodology for producing reliable evidence of program effects. AFDC recipients who applied to participate in TOPS, met the eligibility criteria, and were deemed "appropriate" by TOPS staff were randomly assigned to either an experimental or a control group. Two experimentals were assigned for every one control. Members of the experimental group were eligible for the full TOPS sequence, but not for other education and training activities except limited basic education. Members of the control group were to be treated like other WEET registrants: they were eligible to enroll in any employment- or education-related activity available through WEET, JTPA, community colleges or other organizations. This included participation in components similar to those offered in TOPS -- pre-vocational training, work experience or OJT -- but not in all three. Nor was there any attempt to coordinate a sequence of components. Members of the control group had less contact with staff, and any pre-vocational training they received was not in the same classes as those held for the TOPS sequence.

The behavior of the control group measures what the experimental group would have experienced in the absence of TOPS. Because individuals had to volunteer to participate in TOPS and were screened before random assignment for problems that could interfere with participation, it was likely that members of the control group would seek out and receive WEET or other alternative services. This did in fact happen: 52 percent of the controls participated in employment-related activities. This means that the experimental-control differences in the Maine evaluation are a measure of the effectiveness of offering the TOPS sequence compared to a range of alternative activities available through WEET or other community programs,

including some components similar to those offered in TOPS.

The evaluation has three parts: an impact analysis, a benefit-cost analysis and a process analysis. The impact analysis measures the effects of the TOPS sequence on the employment, earnings and welfare receipt of enrollees. Outcomes in these areas are analyzed using information from a variety of state records, including the earnings reported to the Unemployment Insurance system, AFDC payment records and WEET activity data relating to TOPS and other services.

The benefit-cost analysis uses the impact estimates and a wide variety of other sources to take account of the program's benefits and costs as comprehensively as possible. These benefits and costs are assessed from several different perspectives -- in particular those of government budgets, taxpayers, welfare recipients and society as a whole -- to allow estimates not only of the efficiency of the program but also of the gains and losses to the groups it affects directly. As in the impact analysis, the benefits and costs are estimated as the net effects of TOPS (i.e., the differences between the benefits and costs for the experimental group and those for the control group).

The process analysis describes the program in operation and was the focus of the interim study. In addition to discussing management issues, particularly interagency relationships in the implementation of TOPS, the interim study examined the recruitment and participation patterns of the research sample randomly assigned through March 1984 and the process of OJT development. The process sections of this final report present data on program participation that were unavailable at the time of the earlier report. They focus in particular on participation in the OJT component and

its function as a transitional employment strategy.

V. Differences Between the TOPS Evaluation and Other MDRC Evaluations

The TOPS evaluation differs in a number of important ways from other evaluations of welfare initiatives conducted by MDRC since 1981.[6] First, in other studies, MDRC evaluated a large part of the WIN or WIN Demonstration system; in Maine, it evaluated TOPS, a single program offered within the WIN Demonstration system (WEET). Second, the other initiatives were broadly targeted to the WIN-mandatory applicant and/or recipient caseload, whereas Maine targeted TOPS to a small subset of the AFDC caseload and recruited voluntary WEET registrants as well as mandatory registrants. Third, the segment of the caseload eligible for TOPS was screened for interest, appropriateness and potential barriers to participation before being randomly assigned, a practice not followed in other states. Fourth, no one was required to enroll in TOPS -- the research sample was composed of eligible individuals who asked to participate. Thus, the impacts presented for Maine apply only to a very small proportion of the AFDC caseload, not to the substantial portion seen in other states. Finally, the high level of participation by the control group in employment and training activities differentiates the TOPS evaluation from others in MDRC's recent evaluations of welfare employment initiatives.

In terms of the scale and voluntary nature of the program, it is probably more appropriate to think of the TOPS evaluation in the context of the National Supported Work Demonstration, designed and managed by MDRC between 1974 and 1979, rather than MDRC's recent evaluations of welfare employment initiatives.[7] Like TOPS, Supported Work was a relatively small-

scale program. It included among its target groups AFDC recipients who had been on welfare for at least 30 out of the prior 36 months and who had applied to participate. Participants were offered subsidized jobs -- paid for, in part, through grant diversion -- designed to develop basic employability by providing close supervision, peer support and graduated stress.

VI. Policy Relevance of the Demonstration

A number of features make the TOPS demonstration of particular relevance to policymakers and program administrators. These include: the nature of the TOPS targeting strategy; the nature of the services provided; the grant diversion funding mechanism; and the challenges posed by interagency coordination.

The TOPS targeting strategy provides important lessons about how disadvantaged program participants are likely to be if states seek to enroll the harder-to-employ as measured by length of welfare receipt and prior employment history but at the same time give priority to those who volunteer for services. This is especially true if staff are allowed discretion in deciding who among the technically eligible is "appropriate." Targeting the harder-to-employ but giving priority to those who apply is an approach that figures prominently in some recent legislative proposals for reforming the nation's welfare system. Those who apply for services and are accepted by the program are likely to be more motivated or face fewer barriers to participation than other WIN registrants. This self-selection factor is extremely important in understanding the behavior of the TOPS research sample, because 61 percent of the TOPS sample (experimentals and controls) were not even required to register for WIN, primarily since they

had children under the age of six. In addition, although TOPS sample members were disadvantaged in that they had prior welfare experience and little prior employment, they were relatively well-educated.

Many questions remain about the relative effectiveness of providing more intensive services than job search or work experience to the AFDC caseload. The TOPS sequence qualifies as an intensive program by virtue of its length (it typically took 11 months to finish the full cycle); the amount of staff time devoted to the provision of services; and its cost. The average cost of operating the TOPS sequence for each member of the experimental group was $2,627, including the costs of support services and employer wage subsidies. An additional $134 was spent per experimental on education, job search and training activities not available through TOPS and accompanying support services. By comparison, an average of $517 was spent per control in the TOPS research sample. The demonstration provides an opportunity to learn about the impacts and cost-effectiveness of the particular type of treatment offered in TOPS for a selected group that is not typical of the AFDC population as a whole. It should also be stressed that TOPS did not provide classroom training or extensive opportunities for remedial or basic education -- services that also fall into the intensive category.

The grant diversion funding mechanism in the OJT component makes TOPS of considerable interest to policymakers, as questions remain about the possible scale, cost implications, and administrative feasibility of this investment strategy when used to fund an OJT program. To answer some of these questions and encourage states to use grant diversion, the federal Office of Family Assistance made available, on a competitive basis, special

funds to operate and evaluate grant diversion programs in 1983. Maine was one of six states selected for such an award. These funds, together with a matching grant from the Ford Foundation, made the TOPS evaluation possible.[8]

Finally, the emphasis on interagency coordination in operating TOPS provides lessons about the obstacles to effective coordination between welfare employment initiatives and JTPA programs, and possible ways to overcome them. These issues were discussed in detail in the previous implementation report.

* * * * *

The remainder of this report consists of six chapters. Chapter II describes the research design and data sources, the recruitment and screening process, and the characteristics of the research sample. Chapter III discusses the participation patterns of the experimental group in TOPS and the implementation of each of the components that make up the TOPS sequence. Chapter IV examines the behavior of the control group and discusses labor market conditions and AFDC grant calculation in Maine during the demonstration period to provide the basic context for interpreting the impact and benefit-cost findings that follow. Chapter V considers the program's impacts on employment, earnings, and welfare receipt. Chapter VI weighs the costs and benefits of the program from the perspectives of welfare recipients, government, taxpayers and society as a whole. Chapter VII concludes the report with a discussion of the broader implications of the TOPS experience.

CHAPTER II

RESEARCH SAMPLE, DESIGN AND DATA SOURCES

This chapter begins with a description of the process of selecting the research sample and a presentation of key characteristics of the TOPS sample members in comparison to those of the entire WEET caseload. It then discusses the experimental design used in the evaluation. It concludes by outlining the key data sources and assessing their accuracy.

I. The Research Sample

A. Recruitment and Assessment

In contrast to other welfare employment initiatives recently studied by MDRC, TOPS was never designed to get as many clients as possible into the program. Instead, it was intended to be implemented as one option among an array of activities available to WEET registrants, and to serve a relatively small subset of the caseload. AFDC recipients were not automatically assigned to TOPS; they had to apply to participate, and meet both objective and subjective eligibility criteria before being enrolled.

Recruitment and assessment was the responsibility of the WEET staff, although in some locations JTPA staff sat in on the assessment interviews.[1] To be eligible for TOPS, women had to have been on welfare for at least six months and not be currently employed. In addition, they were to be screened out if staff felt they were not "appropriate" candidates because problems with child care, transportation, emotional or physical health presented barriers to participation, or they lacked sufficient motivation

or could not pass a basic reading test. In practice, local staff exercised considerable discretion in deciding whether a potential client was appropriate for TOPS, going beyond these criteria. Some staff were reluctant to work with women who lacked a high school diploma or GED, or had only minimal occupational skills because of their concern about putting unprepared clients into OJT positions. Concerned also about the motivation of participants, staff weighed the reasons people gave for their interest and sometimes looked for additional proof of motivation or character recommendations.

While some WEET staff were willing to "take a chance" on applicants they had doubts about, others -- influenced in part by concerns expressed by JTPA staff -- preferred not to meet their enrollment goals rather than to enroll more questionable applicants. Staff records indicated that, for the sample randomly assigned between October 1983 and March 1984, about three out of every ten women who applied and were interviewed for TOPS were considered inappropriate.

The care WEET staff took in selecting women for TOPS helped keep the number of enrollees relatively small and turned recruitment into a protracted process. In every office, staff identified recruiting and interviewing applicants as the most time-consuming task in implementing TOPS. Seventeen percent of the total TOPS operating cost of $479,003 was spent on this process.

The outreach and assessment process involved two steps. First, staff reviewed their WEET files to identify potential eligibles already in the caseload, and contacted those individuals by phone or letter. In one location, staff also made home visits. Second, to identify potential

eligibles not currently registered with WEET, staff reviewed lists of welfare recipients provided by the Bureau of Income Maintenance of the Department of Human Services and mailed letters to possible candidates. Advertisements were also placed in newspapers some weeks before the start of each cycle. Interested applicants were asked to call the office to schedule an interview; the interviews generally lasted an hour, and in some locations were conducted jointly by WEET and JTPA staff.

B. Research Design and the Structure of TOPS

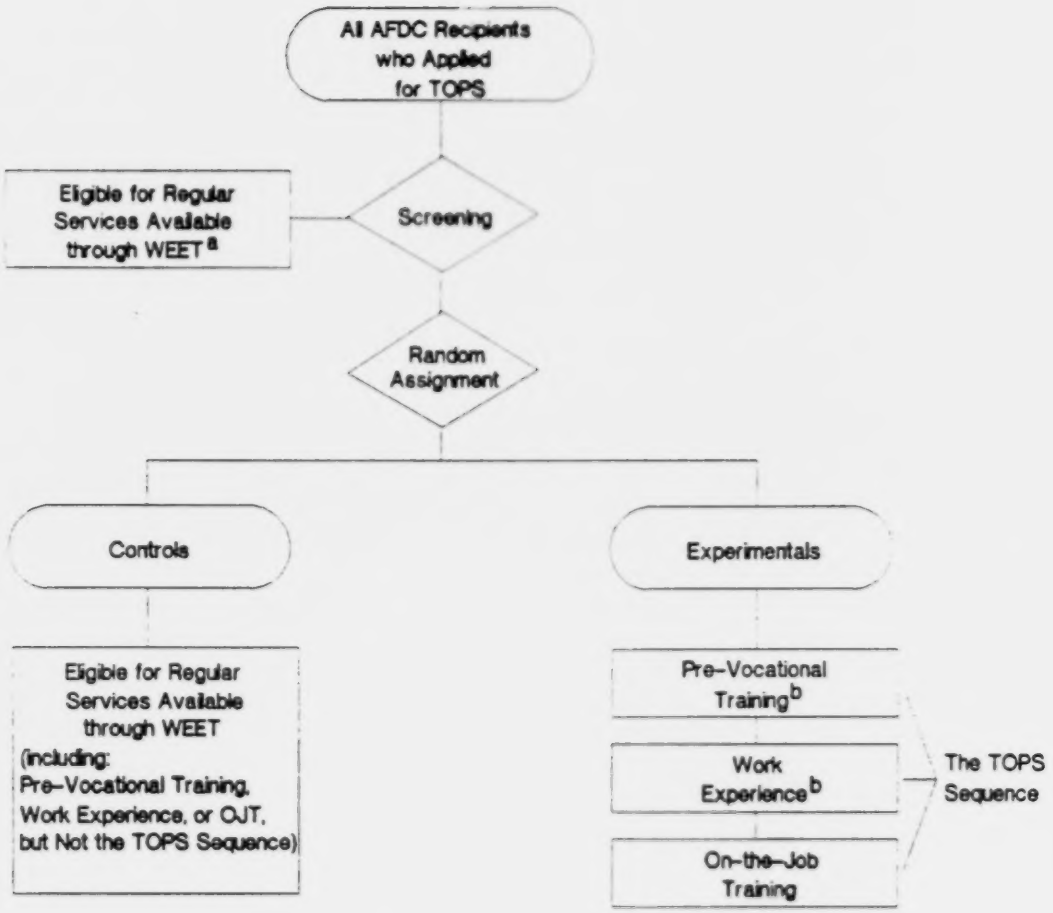
After screening, all the selected enrollees were randomly assigned to either experimental or control status. The inclusion of a control group was intended to permit the estimation of net program effects by comparing measured outcomes (such as earnings and welfare receipt) of the experimental group with those of the control group. Research has shown that a substantial proportion of AFDC recipients find jobs and leave welfare on their own, without receiving services.[2] A control group makes it possible to separate out this movement (which is a product of individual characteristics of the recipients and factors in the wider environment) from the effects of the program, by contrasting the outcomes for two research groups who are similar in all respects except the program treatment.

Experimentals were to enroll in the TOPS program with its prescribed sequence of prevocational training, unpaid work experience, and then OJT. Controls could receive any WEET services -- including prevocational training, unpaid work experience, or OJT -- but not the entire TOPS sequence of activities. (See Figure 2.1.) The control group, therefore, does not represent a "no-program" benchmark but rather a benchmark of alternative program services. Chapter IV describes the experiences of the TOPS

FIGURE 2.1

MAINE

TOPS RESEARCH DESIGN


All AFDC Recipients who Applied for TOPS
Eligible for Regular Services Available through WEET[a]
Screening
Random Assignment
Controls
Experimentals
Eligible for Regular Services Available through WEET (including: Pre-Vocational Training, Work Experience, or OJT, but Not the TOPS Sequence)
Pre-Vocational Training[b]
Work Experience[b]
On-the-Job Training
The TOPS Sequence

[a] The regular services available through WEET are the same services available to the control group.
[b] In some locations experimentals were allowed to participate in limited basic education.

evaluation's control group in detail.

Because of the relatively small size of the WEET registrant pool in Maine and the selectivity of the recruitment process, random assignment was conducted at a ratio of two experimentals to one control. WEET program operators felt that it was important to serve a large proportion of those recruited; a research design in which only 50 percent of the sample received services was not considered acceptable. This larger proportion of experimentals also ensured that sufficient numbers participated in the third and final component (on-the-job training) to permit discussion of this component.

C. Sample Build-up

The random assignment period lasted from October 18, 1983, to December 13, 1984, during which 297 clients were randomly assigned to the experimental group and 147 to the control group.[3] The multi-component sequence of activities that constituted TOPS was not operated as a continuous on-going program that eligibles could enter at any time. Rather, TOPS was offered in a series of discrete cycles, begun at irregular intervals, each consisting of the three components. The start of a pre-vocational training class was considered the start of a cycle, and the women who began pre-vocational classes together were treated by staff as a distinct group, even though they moved through the later components in the sequence at varied paces. Over the course of the demonstration, 30 TOPS cycles were operated at 15 different locations throughout the state; the first cycle began in November 1983, the last in January 1985. (See Table 2.1.)

The sample build-up in each region over the enrollment period is shown

TABLE 2.1

MAINE

TOPS PROGRAM CYCLES, BY SITE

Region	Number of Cycles	Range of Participants per Cycle[a]
Region I		
Portland	4	6 - 21
Biddeford	3	6 - 10
Region II		
Lewiston	3	6 - 10
Norway	2	4 - 7
Region III		
Augusta	1	9
Bath	2	9 - 10
Damariscotta	1	5
Skowhegan	1	5
Waterville	1	9
Region IV		
Bangor	4	5 - 10
Ellsworth	2	4
Machias	1	7
Region V		
Presque Isle	2	8 - 9
Caribou	2	12 - 16
Houlton	1	13
Total	30	

SOURCE: Maine Central WEET office calculations from TOPS Client Tracking Reports.

NOTES: [a]Participation is defined as attending Pre-Vocational Training for at least one day.

in Table 2.2. The target sample size was 900 experimentals and controls, much larger than the actual sample of 444. This shortfall reflected problems in making eligible women interested in applying for the TOPS combination of services in preference to other WEET activities, as well as staff selectivity in enrolling clients. The small sample size, therefore, should not be taken as an indication of any general lack of interest in receiving services on the part of AFDC recipients. Indeed, about 50 percent of new WEET registrants are AFDC recipients who are not mandatory WIN registrants and therefore do not have to register for any employment services.[4]

All the TOPS sample members were female single heads-of-household. Nearly all were white and over half were divorced or widowed. In keeping with the program goals, most of the sample members were relatively long-term AFDC recipients -- 63 percent had been receiving AFDC for more than two years -- and only about one-third had been employed in the year prior to random assignment. Half (49 percent) had children under the age of six and 61 percent were exempt from WIN registration requirements. The sample members had worked an average of only three months in the two years prior to random assignment. However, due to the additional screening criteria developed by local staff, they were relatively well educated: 75 percent had received a high school diploma or GED by the point of random assignment. (For sample characteristics see Table 2.3.)

Random assignment was largely successful in producing comparable experimental and control groups. (See the first two columns of Table 2.3.) However, as expected when dealing with small sample sizes, there were some differences between the experimental and control groups. Statistically

TABLE 2.2

MAINE

DISTRIBUTION OF SAMPLE MEMBERS,
BY PERIOD OF RANDOM ASSIGNMENT, REGIONAL OFFICE, AND RESEARCH GROUP

Period of Random Assignment	Region I		Region II		Region III		Region IV		Region V		Total	
	Experimentals	Controls	Experimentals	Controls	Experimentals	Controls	Experimentals	Controls	Experimentals	Controls	Experimentals	Controls
October-December 1983	34	16	10	5	13	7	21	9	9	5	87	42
January-March 1984	18	9	8	4	25	10	19	10	22	14	92	47
April-June 1984	8	4	12	8	3	0	10	3	19	8	52	24
July-September 1984	8	4	8	2	6	4	4	2	10	4	36	16
October-December 1984	6	3	4	3	4	3	3	2	13	7	30	18
Total	74	36	42	22	51	24	57	26	73	38	297	147

SOURCE: Tabulations from MDRC Client Information Sheets.

TABLE 2.3

MAINE

SELECTED CHARACTERISTICS OF THE RESEARCH SAMPLE
AT THE TIME OF RANDOM ASSIGNMENT, BY RESEARCH GROUP

Characteristic	Experimentals	Controls	Total
Region [%]			
I	24.9	24.5	24.8
II	14.1	15.0	14.4
III	17.2	16.3	16.9
IV	19.2	17.7	18.7
V	24.6	26.5	25.2
Age [%]			
24 Years or Less	25.1	17.8	22.7
25 to 34 Years	50.5	47.3	49.4
35 to 44 Years	20.3	28.1	22.9*
45 to 69 Years	4.1	6.8	5.0
Average Age [Years]	29.6	31.1	30.1**
Ethnicity [%]			
White, Non-Hispanic	96.9	100.0	97.9*[f]
Black, Non-Hispanic	1.7	0.0	1.2[f]
Hispanic	0.7	0.0	0.5[f]
Other	0.7	0.0	0.5[f]
Degree Received [%]			
None	26.0	22.9	25.0
General Equivalency Diploma	23.6	27.1	24.8
High School Diploma	50.3	50.0	50.2
Average Highest Grade Completed	11.3	11.3	11.3
Marital Status [%]			
Never Married	26.8	22.9	25.5[f]
Married, Living With Spouse	0.3	0.7	0.5[f]
Married, Not Living With Spouse	14.6	11.4	13.6
Divorced or Widowed	58.2	65.0	60.4
Average Number of Children Under 19 Years	1.79	1.84	1.81
Any Children [%][a]			
Less Than 6 Years	52.8	42.1	49.3**
Between 6 and 18 Years	64.6	75.0	68.0**

[continued]

TABLE 2.3 (continued)

Characteristic	Experimentals	Controls	Total
Prior AFDC Dependency (%)			
Two Years or Less	35.9	38.8	36.9
More Than Two Years	64.1	61.2	63.1
Average Months on AFDC During Two Years Prior to Random Assignment	19.4	19.3	19.4
WEET Status (%)			
Mandatory	36.1	43.5	38.6
Voluntary	63.9	56.5	61.4
Average Number of Months Since Most Recent WEET Registration[b]	7.4	7.3	7.4
Average Months Unable to Work Due to Medical Problems During Two Years Prior to Random Assignment	1.4	1.3	1.3
Held a Job at Any Time During Quarter Prior to Random Assignment (%)[c]	15.5	17.7	16.2
Held a Job at Any Time During Four Quarters Prior to Random Assignment (%)[c]	32.7	38.8	34.7
Average Earnings During Four Quarters Prior to Random Assignment ($)[c]	447.51	682.96	525.46*
Average Months Employed During Two Years Prior to Random Assignment	2.8	3.8	3.2*
For Longest Job Held in Past Two Years[d]			
Average Hourly Wage Rate ($)	3.81	3.69	3.64
Average Weekly Hours	30.9	29.5	30.4
Duration of Jobs (Months)	12.2	14.5	13.0
Sample Size[e]	297	147	444

SOURCE: Calculations from MDRC Client Information Sheets.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

All members of the sample are female single heads-of-household.

(continued)

TABLE 2.3 (continued)

Differences between research groups are statistically significant using a two-tailed t-test or chi-square test at the following levels: * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Distributions may not add to 100.0 percent because sample members can have children in more than one category.

[b]Due to missing data, the sample sizes for average number of months since most recent WEET registration are as follows: 279 for experimentals, 137 for controls and 416 for the total.

[c]Calculated from Unemployment Insurance earnings records from the State of Maine. These data include zero values for sample members not employed.

[d]For questions concerning longest job, sample sizes are based on the number of people who report a longest job on the Client Information Sheet. Due to missing data, for selected characteristics, these sample sizes vary as follows: 125-127 for experimentals, 65 for controls and 190-192 for the total.

[e]For selected characteristics, sample sizes may vary up to 19 sample points due to missing data.

[f]Chi-square test inappropriate due to low expected cell frequencies.

significant differences included: age, race, age of youngest child and prior employment history. Controls were slightly older than experimentals (31.1 vs. 29.6 years); more controls than experimentals were white (100 vs. 96.9 percent); and fewer controls than experimentals had children under six years old (42 vs. 53 percent). The average earnings in the year prior to random assignment (including values of zero for those who did not work) were higher for controls than experimentals ($683 vs. $448); the average number of months employed during the two years prior to random assignment was also larger for controls than for experimentals (3.8 vs. 2.8 months). The impact analysis includes adjustments for these differences.

Compared to a profile of the AFDC caseload in Maine in January 1983, the TOPS research sample showed basic similarities regarding ethnic mix and length of welfare receipt.[5] The two groups were alike in being predominantly female single heads-of-household and white -- reflecting the ethnic composition of the state. They were also alike in the duration of their most recent stay on AFDC: for approximately one-third of both groups, more than two years had elapsed since their most recent case opening.[6] Compared to the WEET caseload, however, the TOPS sample showed some important differences. For example, a smaller proportion of sample members than WEET registrants had completed less than 12 grades of school (33 percent vs. 42 percent). Similarly, a smaller proportion of the TOPS sample had a ninth grade education or less (15 percent vs. 27 percent).[7] The TOPS research sample also included a higher proportion of women exempt from WIN registration requirements.[8]

These comparisons suggest that the screening process for TOPS yielded a sample that is not typical of the WEET and AFDC caseloads on some key

measures. Overall, a number of factors -- the high percentage of sample members who are divorced or widowed, the presence of pre-school children, the relatively high level of educational attainment and the absence of employment history -- suggest that the women in the TOPS sample may represent a displaced homemaker population, that is, women who either have no previous employment or who discontinued working for marriage and family and then fell on hard times.

The TOPS sample is also quite different from the research samples in other state initiatives evaluated by MDRC, which excluded individuals not subject to the mandatory registration requirements in WIN. Maine had the highest percentage of sample members with high school diplomas or GEDs (75 percent) and the highest proportion of recipients who had their own AFDC case for more than two years (63 percent). The TOPS sample also had a high proportion of members with children under the age of six (49 percent); only Arkansas, which required their participation, had a larger proportion of parents with children in this age group (54 percent). (See Appendix A.) These comparisons with other demonstration states further illustrate that the TOPS sample members were a group of screened individuals who, although they had fairly long-term welfare dependency and little prior labor force attachment, were well educated and showed interest in participating.

II. Data Sources

Numerous data sources were used in this evaluation. Administrative records were used to measure outcomes and participation rates. Other documents were used to tally demographic characteristics and more detailed participation information. Much qualitative information, mainly interviews

with program staff, was used in conjunction with this quantitative information. Each data source is described below.

A. Client Information Sheets

The Client Information Sheet (CIS), designed by MDRC and filled out by program staff at the point of random assignment, was the major source of demographic and socioeconomic characteristics of each sample member. It provided information which helped document the characteristics of the TOPS sample. The CIS included data on age, sex, ethnicity, family composition and educational attainment as well as basic information on welfare and employment histories, with particular attention given to each sample member's experiences during the two years prior to random assignment. The CIS data were complete for 95 percent of all sample members.[9]

B. Administrative Records

Administrative records were the primary data source for the impact and benefit-cost analyses.[10] Table 2.4 summarizes the types of records data used, and the length of follow-up for each quarter of random assignment.

1. The State of Maine Unemployment Insurance System

The Unemployment Insurance (UI) system provided data on the earnings of the sample members, by calendar quarters.[11] These individual earnings amounts include earnings received from the OJT employers as well as unsubsidized employers. Using social security numbers to identify the sample members, MDRC collected data from the automated earnings file for each sample member from one year prior to random assignment until the end of the second quarter of 1987. The first calendar quarter, the quarter of random assignment, can include earnings before random assignment.

TABLE 2.4

MAINE

LENGTH OF AVAILABLE FOLLOW-UP BY DATA SOURCE AND PERIOD OF RANDOM ASSIGNMENT

Data Source	Last Date Data Are Available	Point at Which Data Collection Begins	Length of Follow-Up By Period of Random Assignment				
			October - December 1983	January - March 1984	April - June 1984	July - September 1984	October - December 1984
WEET Tracking Records	November 1985	Date of Random Assignment	Twenty-Three Months	Twenty Months	Seventeen Months	Fourteen Months	Eleven Months[a]
JTPA Tracking Records	November 1985	Date of Random Assignment	Twenty-Three Months	Twenty Months	Seventeen Months	Fourteen Months	Eleven Months[a]
Quarterly Employment and Earnings[b]	Second Calendar Quarter of 1987	Four Quarters Prior to Random Assignment	Fourteen Quarters After Random Assignment	Thirteen Quarters After Random Assignment	Twelve Quarters After Random Assignment	Eleven Quarters After Random Assignment	Ten Quarters After Random Assignment
Monthly AFDC Grant Payments[c]	November 1987	February 1983	Forty-Eight Months	Forty-Five Months	Forty-Two Months	Thirty-Nine Months	Thirty-Six Months
Weekly Unemployment Insurance Benefits	December 1988	Twelve Months Prior to Random Assignment	Thirty-Seven Months	Thirty-Four Months	Thirty-One Months	Twenty-Eight Months	Twenty-Five Months

NOTES: [a]Sample members randomly assigned in December 1984 have between 11 and 12 months of program tracking data, depending on whether they were randomly assigned in the early or later part of December. These sample members are considered to have 12 months of participation follow-up data.

[b]Employment and earnings data are based on Unemployment Insurance earnings records, which report earnings on a calendar quarter basis. Since quarter 1, the quarter of random assignment, may contain some earnings from the period prior to random assignment, it is excluded from the follow-up period for employment and earnings.

[c]The first month of follow-up for welfare grant payments is the month in which an individual was randomly assigned. For the impact analysis, monthly data for welfare grant payments are aggregated into calendar quarters to match employment and earnings data. Since quarter 1, the quarter of random assignment, is excluded from the follow-up period for employment and earnings, it is also excluded from the follow-up period for measures of AFDC receipt.

Therefore, it is not counted as a follow-up quarter in the impact analysis.

Weekly Unemployment Insurance compensation amounts paid to the sample members were also collected. Records of UI benefits were obtained through a manual process of matching the social security numbers of the sample members with a list of those individuals receiving any compensation from one year prior to random assignment through December 1986. These UI benefit amounts were used in estimations for the benefit-cost analysis.

It is important to understand that, in some instances, the UI data system underestimates income because of unreported earnings. The UI measure of earnings does not include off-the-books earnings, or the earnings of people who have moved or work out of the state. Also, employers may not report the earnings.

Because of the possibility of under-reported earnings, measures were taken to determine the accuracy and completeness of the Maine UI earnings data. A comparison of self-reported employment prior to random assignment from the CIS and UI earnings records revealed a slightly larger, though still small, proportion of discrepancies than is found from the same comparison in other state initiatives MDRC has evaluated.[12] This does not constitute a major limitation for the evaluation, however, because there is no reason to believe there were differences in the reporting of experimental and control earnings, and therefore no reason to suspect bias in the experimental-control differences.

2. The State of Maine AFDC Payments System

This data set supplied the actual monthly AFDC payment amounts received by each recipient. The state's computerized system, which issues all automated AFDC grant checks, was the direct source of this information.

These monthly payments were aggregated into calendar quarter amounts to match earnings.[13] Therefore, the calendar quarter of random assignment is not considered a follow-up quarter in the impact analysis for the AFDC data.

For all sample members participating in TOPS OJT and therefore having a portion of their grant diverted, these AFDC grant amounts represent the residual payment amount (i.e., the amount paid directly to the client). The diverted grant amount (i.e., the amount put in the grant diversion pool) is not included in reported AFDC outcomes for individuals. If an OJT participant had her entire grant diverted (i.e., the amount of her earnings made her ineligible to receive an AFDC grant payment) she would remain in OJT but have no AFDC payment. Therefore she would not appear as an AFDC recipient in the outcome measure of AFDC receipt in the impact analysis.

AFDC data were collected from February 1983 through November 1987. For each sample member, therefore, there are data beginning at least eight months prior to random assignment and for 36 subsequent months including the month of random assignment.[14]

3. WEET Information System

The WEET Information System provided computerized data on program participation in services provided by WEET as well as information on job placement and deregistration. Information was collected from October 1983, the beginning of random assignment, through November 1985. Sample members have between 11 and 26 months of participation follow-up data, depending on their date of random assignment. Additional participation information from the manual tracking logs kept by caseworkers was incorporated into the WEET data to supplement knowledge of program activity within TOPS and WEET.

4. JTPA Information System

The JTPA system provided information on participation in all of its services. These data were used to monitor additional services received outside of TOPS. Of primary interest was its use in measuring the level of services received by the control group. These data were collected for the same period as the WEET tracking data, from October 1983 to November 1985.

C. On-The-Job Training Contracts

Copies of the OJT contracts written by WEET, or by JTPA for WEET, were collected for all experimentals placed in grant-diversion funded OJT positions through TOPS from October 1983 through December 1986. The contracts written for each OJT placement supplied some necessary supplemental information about on-the-job training. They were used to calculate average wages, hours and scheduled duration. In conjunction with supplemental information gathered from the WEET staff, the actual number of weeks of participation were also calculated. In addition, the contracts supplied descriptive information about the occupational distribution of these placements.

D. Worksite Survey

MDRC staff conducted telephone and worksite interviews with a small sample of supervisors of clients in work experience and OJT positions. This information was used for descriptive purposes and to estimate some components of the benefit/cost analysis.

E. Field Research

MDRC staff made repeated trips to state and local WEET and JTPA offices to interview staff about administrative arrangements in Maine, the background of welfare reform in the state, the JTPA and WEET systems, and local variations in TOPS services and structure.

CHAPTER III

PARTICIPATION IN TOPS

This chapter discusses the institutional setting of the TOPS demonstration, the movement of the experimental group through the sequence of TOPS activities, and the characteristics of the OJT positions. It also describes how each of the TOPS components was implemented, paying particular attention to the job development process in the OJT phase.

I. Institutional Setting

The TOPS sequence was designed to prepare women for jobs by providing opportunities to enhance their self-esteem, develop mature work attitudes and acquire experience and training in a supervised work setting. The combination of services that constitute the program model add up to an intensive program treatment, as indicated by a number of different measures. First, the sequence was lengthy: it typically took participants in all three components 11 months to complete the full cycle. With a few exceptions, enrollees first participated in pre-vocational training, lasting two to five weeks; they were then assigned to work experience positions lasting for up to 12 weeks; they were then eligible for OJT positions for up to six months. Second, both the unpaid work experience and OJT components, as implemented, provided substantive experience in real work settings. Third, during the pre-vocational training and work experience components, TOPS participants were the recipients of considerable amounts of staff time and attention. Fourth, the program was relatively expensive

to run, costing an average of $2,627 per experimental. About half of this figure represents the cost of support services and allowances, case management, interagency coordination and related administrative activities; this underscores the emphasis placed on support services and case management as critical elements of employability development in the TOPS program.

Both WEET and JTPA staff indicated that their work with TOPS participants required a greater investment of time and energy than did the services provided to other WEET or JTPA enrollees. This reflected the smaller than usual staff-to-client ratios in the TOPS pre-vocational classes, and the addition of certain activities, i.e., support groups and job search, not envisioned in the design. In addition, WEET staff estimated that they spent extra time counseling participants, arranging support services, developing work experience placements, monitoring clients' progress through the lengthy sequence and coordinating activities with staff in other agencies. All these extra functions are reflected in the costs of the program which are generally higher than comparable activities offered in other welfare employment programs MDRC has evaluated since 1981.

All WEET staff worked with TOPS participants in addition to their usual caseload. The only staff responsible just for TOPS were five full-time "coordinators," one per region, hired specifically for the demonstration project. They were initially employed to maintain the reporting data necessary for the research, but some of the coordinators eventually took on a more substantive role in recruiting, monitoring and serving as liaisons with the JTPA staff. JTPA staff who worked on TOPS also maintained other responsibilities for JTPA programs and were not assigned just to TOPS.

The progress of the TOPS experimentals was closely monitored by WEET

staff who, in addition to keeping WEET's usual case file records, filled out monthly 'participation logs' indicating the completion of each week of activity and any reasons for interruption or termination.

The implementation challenges in mounting the demonstration were considerable, as discussed in the interim TOPS report.[1] Both WEET and JTPA staff were still adjusting to their new roles when the demonstration began. Moreover, the thrust of TOPS did not always fit neatly into the WEET structure. There was tension, for example, between the strong central office role needed to ensure the demonstration was implemented as planned, and the encouragement of local diversity and line staff flexibility that was a hallmark of the new WEET system. In particular, staff in some local offices questioned whether OJT training was more appropriate than classroom training for all those who met the TOPS eligibility criteria. As a result, they tended to be more selective in recruiting participants than central staff had anticipated. They also felt that the amount of time involved in operating TOPS interfered with their ability to serve their full caseload of clients.

Other difficulties were encountered in carrying out the interagency coordination. In theory, the two systems had good reason to collaborate. WEET staff could draw upon JTPA's greater experience in job development and placement, as well as its financial resources. JTPA agencies gained both a referral source that could help them fulfill their requirement to serve a quota of AFDC recipients and a funding source to provide support services that were otherwise unavailable under the JTPA legislation.

In practice, however, coordination presented numerous difficulties. WEET and JTPA staff had quite different philosophies about working with the

disadvantaged -- stemming in part from the different measures by which their performance was judged -- and different standards for determining whether participants were job-ready. JTPA staff tended to be more stringent and to value more heavily the needs of the employer; WEET staff were more protective of clients and less focused on the employers' perspective. Since JTPA staff were largely responsible for the OJT development, the JTPA philosophy had important repercussions at this critical stage in the TOPS sequence.

Initially, poor communication channels, the absence of a central authority to decide between competing priorities, and different expectations about staff and client roles in each phase of TOPS made the transition between components difficult. They also complicated the task of monitoring the progress of participants through the entire sequence. Working out these differences required considerable adjustments in the roles and responsibilities of each local office as the demonstration progressed, as well as frequent refinements in the content of the services offered in the TOPS components. Staff in both systems worked hard to iron out their differences, and coordination improved over time. Nevertheless, tension between the two agencies made the implementation of TOPS more difficult, particularly during the early stages of the demonstration.

II. Participant Flow in TOPS

As would be expected with a program for which clients applied and were then screened for appropriateness, participation in the first TOPS activity was relatively high. A total of 89 percent of the experimental sample participated in a TOPS pre-vocational class within the uniform follow-up

period of 12 months after random assignment (Table 3.1). Participation rates in the other components were progressively lower: 68 percent of the experimentals were placed in a work experience slot within 12 months and 29 percent were placed in an OJT position within 12 months. A detailed study of participant flow among the sample randomly assigned between October 1983 and March 1984 indicated that the fall-off occurred primarily between components: if participants entered pre-vocational training or work experience, they tended to complete the activity.[2]

No additional experimentals entered pre-vocational training or work experience after the 12-month follow-up period, but six TOPS enrollees entered OJT more than a year after random assignment. Although the research design specified that TOPS enrollees should not participate in training or long-term education, a substantial minority of the experimental sample did enroll in such services. (See Table 3.2.) Those enrolled in education reflect both those who participated in basic education -- as allowed in the TOPS design -- and those who enrolled in more advanced or longer-term courses. In addition, about one-third of the experimentals participated in group job search, individual job search, or both. This reflects the fact that, as discussed later in this chapter, the participants' own job search became an important aspect of the OJT development phase in TOPS.

During the entire follow-up period, the largest proportion (39 percent) of enrollees participated in a combination of pre-vocational training and work experience; 27 percent participated in all three TOPS components; 19 percent participated only in pre-vocational training. (See Table 3.3.) A number of factors account for the declining level of

TABLE 3.1

MAINE

TWELVE-MONTH PERFORMANCE INDICATORS
FOR EXPERIMENTALS

Performance Indicator	Number	Percent
Participated in Any TOPS Component	266	89.6
Participated in Pre-Vocational Training	263	88.6
Participated in Work Experience	201	67.7
Participated in On-the-Job Training	85	28.6
Entered Employment[a]	57	19.2
Sample Size	297	

SOURCE: MDRC calculations from WEET Information System and JTPA Information System data.

NOTES: Sample members randomly assigned in December 1984 have between 11 and 12 months of participation follow-up data, depending on whether they were randomly assigned in the early or later part of December. These sample members are considered to have 12 months of participation follow-up data.

Participation is defined as attending an activity for at least one day.

[a]Job placement information is based on employment that is reported to WEET staff. This percentage represents sample members who entered employment and did not participate in On-the-Job training. Program placement data will not be used to measure impacts.

TABLE 3.2

MAINE

PARTICIPATION IN WEET AND JTPA SERVICES FOR EXPERIMENTALS
OVER THE ENTIRE FOLLOW-UP PERIOD

Performance Indicator	Number	Percent
Participated in Any Activity	276	92.9
Participated in Either Pre-Vocational Training, Work Experience, or On-the-Job Training	266	89.6
Participated in Pre-Vocational Training	263	88.6
Participated in Work Experience	201	67.7
Participated in On-the-Job Training	91	30.6
Participated in Group Job Search	26	8.8
Participated in Individual Job Search	92	31.0
Participated in Education	18	6.1
Participated in Training	9	3.0
Sample Size	297	

SOURCE: MDRC calculations from WEET Information System and JTPA Information System data.

NOTES: Sample members have between 11 and 26 months of participation follow-up data, depending on their date of random assignment. That is, sample members randomly assigned early in the demonstration have more follow-up than sample members randomly assigned later in the demonstration.

Participation is defined as attending an activity for at least one day.

TABLE 3.3

MAINE

PARTICIPATION PATTERNS IN TOPS ACTIVITIES FOR EXPERIMENTALS
OVER THE ENTIRE FOLLOW-UP PERIOD

Performance Indicator	Number	Percent
Participated in Pre-Vocational Training Only	57	19.2
Participated in Work Experience Only	1	0.3
Participated in On-the-Job Training Only	0	0.0
Participated in Pre-Vocational Training and Work Experience Only	117	39.4
Participated in Pre-Vocational Training and On-the-Job Training Only	8	2.7
Participated in Work Experience and On-the-Job Training Only	2	0.7
Participated in the TOPS Sequence [Pre-Vocational Training, Work Experience, and On-the-Job Training]	81	27.3
Did Not Participate in Any TOPS Activity	31	10.4
Sample Size	297	100.0

SOURCE: MDRC calculations from WEET Information System and JTPA Information System data.

NOTES: Sample members have between 11 and 26 months of participation follow-up data, depending on their date of random assignment. That is, sample members randomly assigned early in the demonstration have more follow-up than sample members randomly assigned later in the demonstration.

Participation is defined as attending an activity for at least one day.

participation in the subsequent components in the TOPS sequence. Some people got jobs on their own, went off welfare for other reasons or moved out of the area. Some ceased to participate because of problems with health, child-care arrangements or other family situations. Others lost interest in the program or decided that they wanted some other type of training or education.[3] Still other sample members were considered inappropriate for services at later screening points in the program, as discussed below.

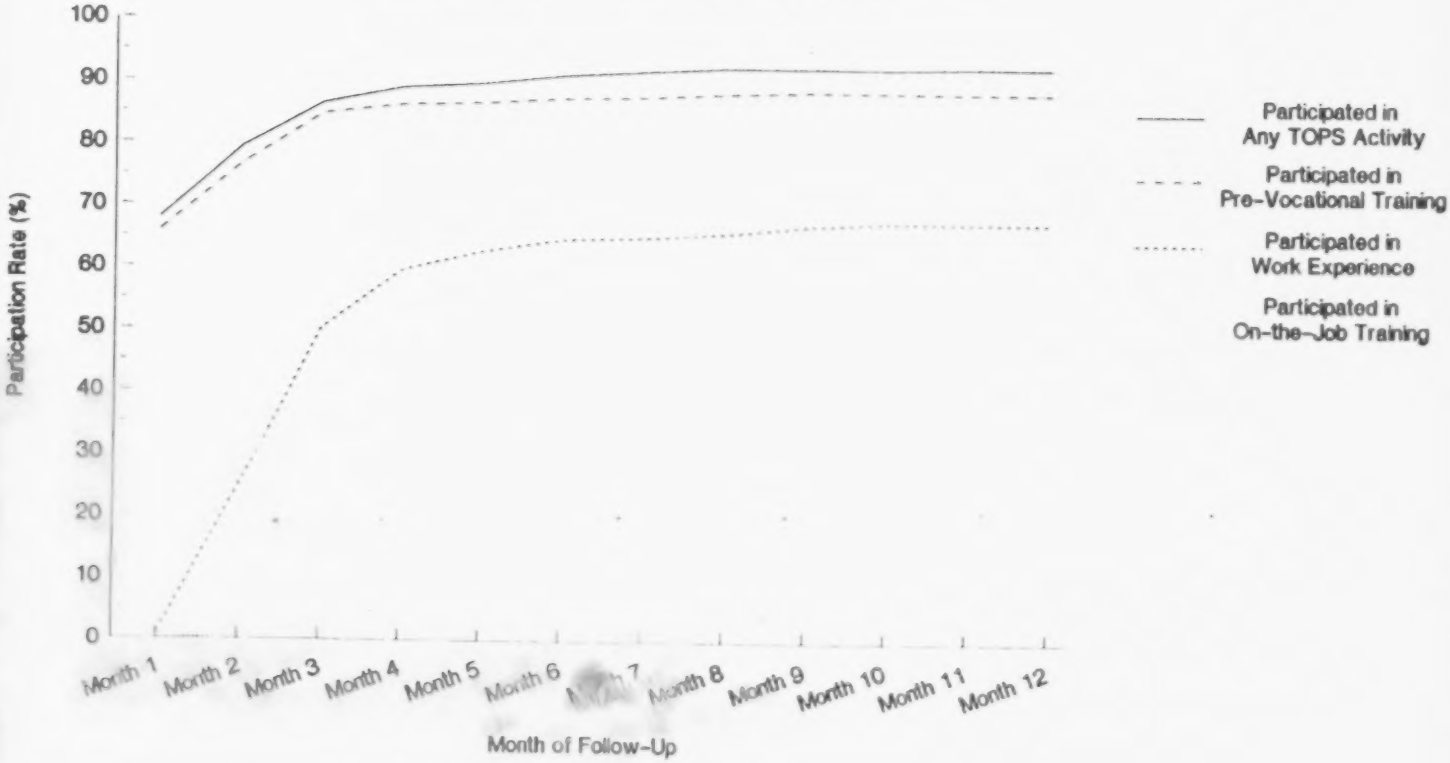
Only two members of the experimental group were sanctioned for non-participation. This reflects both the large proportion who were exempt from mandatory participation requirements and the general philosophy of the WEET program. Staff wanted to work with AFDC recipients who were interested in participating; there was no intent to sanction in order to reduce welfare costs. If clients were sanctioned, it was because of other problems in addition to non-compliance.

Most experimentals entered the pre-vocational training and work experience components of TOPS within a few months after random assignment, but participation in OJT grew more slowly and continued to climb throughout the 12 months following random assignment. (See Figure 3.1.) On average, participants in OJT began working in the seventh month after random assignment. Given the fact that the maximum duration of the pre-vocational and work experience components was five weeks and 12 weeks, respectively, this suggests that there was a significant lag between the end of one component and the start of the next. Participants in all three components took 11 months to complete the full TOPS sequence.[4] All but a few participants completed their OJT assignments within 18 months after random assignment.

FIGURE 3.1

MAINE

TRENDS IN CUMULATIVE PARTICIPATION RATES FOR EXPERIMENTALS, BY TOPS COMPONENT



SOURCE AND NOTES. See Table 3.1.

For this reason the six quarters after random assignment are considered the in-program period and follow-up quarters 7 through 11 are considered the post-program period for the impact analysis in Chapter V.

Participation rates by subgroup and region are not presented here because the sample sizes are too small to make such comparisons meaningful.

III. Implementation of the TOPS Components

A. Implementation of Pre-vocational Training

The pre-vocational training was designed to prepare participants for work by familiarizing them with job opportunities, employer expectations and job search techniques. The content of the training differed by site and by cycle as staff updated the materials to better meet enrollees' needs, but all materials were modifications of two basic curricula. One, developed for JTPA enrollees, emphasized employer expectations, appropriate behavior on the job, and how to obtain and keep a job. The other, developed by the Maine Displaced Homemakers Association, placed more emphasis on helping women to make career choices and decide what they wanted to get out of a job. Both curricula included modules on goal setting, values clarification and decision-making, and household budgeting, as well as job hunting, resume writing, and interviewing skills. Staff also discussed how going to work would affect participants' AFDC grants, and taught them how to be their own advocates within the AFDC system. Particular attention was paid to using the pre-vocational classes to increase participants' self-esteem and their expectations about what they could accomplish by going to work. The format included a mixture of lectures and group discussions; enrollees were expected to participate

actively and complete a number of exercises in class and at home. Group dynamics were considered a key part of the approach.

The length of the course varied from site to site, but generally was between 12 and 20 days, spread over a four- or five-week period. Most sites scheduled pre-vocational classes in both the morning and afternoon; in a few locations, time was set aside for remedial education or individual counseling. The pre-vocational classes, for the most part, were quite small, ranging from four to 21 participants; 25 out of the 30 classes had ten or fewer persons enrolled, with an average class size of seven. With the exception of two cycles, the TOPS participants were in pre-vocational classes by themselves, rather than mainstreamed with other WEET or JTPA enrollees. Staff opinions on the optimal size for a pre-vocational class differed, although all agreed that relatively small classes were best. In two WEET offices, staff felt that cycles ran best with six to nine participants, due to the amount of staff time required per participant; in another location, WEET and JTPA staff felt that ten to 12 was a better size to achieve the desired group dynamic.

Staff were enthusiastic about the pre-vocational training in TOPS and remarked on the noticeable improvements in the attitudes of many participants. However, they agreed that pre-vocational training alone was not sufficient job preparation for the TOPS enrollees. After a few participants who were placed directly in OJT after pre-vocational training encountered some problems on the job, it became accepted policy for all participants to enroll in work experience prior to an OJT placement.

B. Implementation of the Work Experience Component

The work experience component in TOPS was intended to develop mature

work attitudes in a real work environment; staff felt it had less potential for substantive skill development. In practice, work experience also served as a way for staff to evaluate participants' job readiness and, thus, their appropriateness for an OJT placement. For some participants, the unpaid work experience position developed into an OJT position. As reported in the interim study, through September 1984, 12 women had been hired as OJT employees by their work experience supervisor out of a total of 41 women who had participated in both work experience and OJT.[5]

Over 60 percent of the work assignments were in clerical positions, and most of the remainder were in other traditionally "female" areas of work. (See Table 3.4.) The standard length of the work experience positions varied between eight and 12 weeks, depending upon the cycle and the location, and the program model was limited to 20 hours of work per week. (This 12-week maximum could be waived on an individual basis.) WEET staff were responsible for developing and monitoring the work experience positions in all but three locations. Where WEET was responsible for implementing the component, the work experience positions had to be in the public or non-profit sector. Elsewhere, placements with private employers accounted for only a small proportion of all work experience positions in an early sample.[6] Nevertheless, some staff felt the restriction on private sector placements severely limited the potential for turning work experience positions into OJT slots, since the OJT phase was targeted to private, for-profit employers.

Most offices tried to individualize the slots to meet participants' job interests. This lengthened the development process, and accounts for much of the lag time between the completion of pre-vocational training and

TABLE 3.4

MAINE

DISTRIBUTION OF WORK EXPERIENCE PARTICIPANTS
BY JOB CLASSIFICATION

Job Classification	Number	Percent
Clerical Occupations	119	62.3
Service Occupations		
Social Services	30	15.7
Food Service	9	4.7
Health Care	8	4.2
Sales/Cashier	6	3.1
Manual Skills Occupations	13	6.8
Other[a]	6	3.1
Sample Size[b]	191	100.0

SOURCE: MDRC calculations from WEET Central Office records of Work Experience job titles.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

Job classifications are based on the U.S. Department of Labor's occupational titles from the Dictionary of Occupational Titles, fourth edition, 1977.

Participation is defined as attending Work Experience for at least one day.

[a]Includes general labor assistant, groundskeeper, horticultural aide, maintenance worker, and laundry workers.

[b]A total of 201 experimentals participated in Work Experience. Ten experimentals were excluded from the above calculations due to missing job classification data.

the start of work experience. Some sites arranged it so that all the work experience positions began immediately after the end of pre-vocational training; in others, entry was staggered over some weeks.

In many locations, staff began to run support group sessions for the participants in work experience jobs. These meetings had two purposes: to help participants deal with problems on the job and the pressures of juggling family and work commitments, and to begin planning for the time when they would enter paid employment. In some locations, the sessions also included work on resumes and job-search skills. The frequency and length of the support groups varied from site to site and cycle to cycle, but sessions were generally scheduled weekly or bi-weekly for one to two hours. Staff indicated that attendance was frequently sporadic, because enrollees had many commitments competing for their time.

Monitoring practices differed from site to site. Some required work experience supervisors to fill out weekly evaluations; others asked for monthly reports. Many relied on verbal comments rather than written forms. WEET staff in some locations also made worksite visits. During this component, participants received an allowance of $1.25 an hour to cover training-related expenses, in addition to their AFDC grant. Most offices required the women to come to the WEET office weekly to pick up the allowance check in order to give staff an opportunity to talk with the participants about their experiences.

MDRC interviews with the supervisors of 17 TOPS participants placed in work experience between May and November 1984 suggest that the work experience component fulfilled the intended purpose of introducing the women to a work setting and giving them the opportunity to learn and practice good

work habits.[7] The interviews indicated that the positions were generally entry level and would have paid between $3.00 and $5.30 an hour. The majority of supervisors found the participants to be at least as productive as regular new employees, if not more so. Most participants were judged to be the same or better than the average new worker in a number of basic work habits, such as punctuality and attendance. Overall, TOPS participants also were judged to have the requisite cognitive skills and general work skills at the start of their assignment. However, among those in positions which required specific occupational skills, two-thirds were considered inadequate when they started the job. In addition, over half of those in jobs requiring them to work without supervision were considered inadequate in this skill when they began. Between one-third and one-half of the participants were judged to have improved their performance in these areas by the time of the interview.

B. Implementation of the OJT Component

That participation in the OJT component was lower than in the preceding activities in the TOPS component is not unexpected. First, in a sequenced program like TOPS, enrollees who stopped participating at an earlier point in the program would not be eligible for placement at the OJT stage. Thus, the pool of potential placements was narrowed from the 297 experimentals to the 201 individuals who entered work experience. (Another eight individuals entered OJT directly after pre-vocational training.) Second, some participants who completed pre-vocational training and work experience found unsubsidized employment or went off AFDC for other reasons, and did not look for an OJT placement. For the 118 participants who took part in work experience but did not participate in OJT within the

month after they should have completed work experience, MDRC calculations show that 33 had unsubsidized jobs and 5 others were no longer on AFDC.[8] From this perspective, the placement rate into OJT rises from 31 percent of the whole sample to 56 percent of those who entered work experience, were still on AFDC, and did not have an unsubsidized job within the month after their work experience was scheduled to end.

These factors are not sufficient, however, to explain why the OJT assignment rate in TOPS was so much lower than participation in the other TOPS components. Employer reluctance to hire AFDC recipients or to use a subsidy is a possible factor, although the fact that a large number of AFDC recipients were placed in OJT positions by both WEET and JTPA during the demonstration period suggests that TOPS did not exhaust the potential market for subsidized workers.[9] This point is reinforced by the fact that OJT positions for TOPS participants were marketed no differently than these other placements. More important as determinants of the number of TOPS placements, as described below, were two other aspects of the TOPS OJT development: the job development process which included additional screening to determine a TOPS participant's appropriateness for an OJT placement, and the heavy reliance on the clients' own job search efforts.

1. The Job Development Process

Except in a few locations, the primary responsibility for placing TOPS participants in OJT positions lay with JTPA staff. In most locations, job development was done by specialized job developers who had placement responsibility -- subsidized and unsubsidized -- for all JTPA enrollees, and who did not work just with TOPS clients. Although WEET staff made efforts to have the job developers meet the TOPS participants earlier in

the program, most job developers had little or no contact with the prospective employees before the start of the OJT development phase.

In general, JTPA staff made few efforts to individualize OJT positions for TOPS clients, in the sense of developing a job specifically for a particular client. Instead, the primary sources of OJT positions for the TOPS clients were referrals from the pool of employment opportunities previously identified by job development staff, jobs identified by clients through their own job search activities, and rollovers from the work experience assignments. As discussed above, 12 out of 41 OJT contracts written through September 1984 were developed out of work experience positions.

The staff role in the OJT development phase included: supervising the job search efforts; providing leads, encouragement and advice; and working directly with employers to develop a pool of available positions for JTPA clients (including but not limited to TOPS). They also made referrals for promising candidates to employers who were hiring.

Once TOPS participants were referred to JTPA for job placement after completing their work experience assignments, it was made clear to them that they were expected to be active in their own job development -- to answer employment advertisements in the newspapers, send out resumes, and call prospective employers identified through the Yellow Pages or through staff contacts. In short, they were expected to apply the job search strategies taught in the pre-vocational component. Over the course of the demonstration, the trend was for staff to intensify and formalize the job search aspects of the OJT development phase. Initially, staff in most locations worked with TOPS clients on a one-to-one basis; some job

developers monitored progress by having TOPS participants report weekly or bi-weekly; others left it up to the enrollees to initiate contact. In a few sites, staff chose to work with the TOPS women as a group. By the final cycles in a few locations, TOPS participants were placed in formal job clubs -- sometimes with other JTPA or WEET clients, sometimes by themselves. This involved intensive, supervised job search activity in the office, for a week or more at a time.

TOPS participants who located a job on their own were still eligible for the OJT subsidy. JTPA job developers -- and sometimes WEET staff -- generally informed the employer about the conditions of the OJT subsidy and, on occasion, were instrumental in negotiating a higher wage level than the employer initially proposed. JTPA offices varied in their approaches to marketing the OJT subsidy. Some instructed their clients to explain that they were candidates for OJT when they applied for a job; others advised clients not to raise the issue until the employer showed interest in hiring them. Some staff wanted OJT candidates to explain how the subsidy worked; others wanted prospective employers to call them directly, and discouraged job applicants from providing anything but the most basic information.

In order to be considered for a referral to an OJT position in JTPA's previously developed pool of jobs, the TOPS participants had to go through another, often informal, screening at the end of their work experience assignment. Interviews with job developers across the state indicated that they were unlikely to refer candidates to OJT positions if:

- candidates were still unsure about the type of job they wanted;

- their skills were inadequate or inappropriate for the type of job they were seeking;
- they lacked "work maturity";
- they were not really interested in working. This category included those who were worried about losing their Medicaid coverage, housing subsidy, or AFDC eligibility if they went to work.

Job developers got a sense of where TOPS participants stood on these issues by interviewing them, reviewing evaluations of their performance in the pre-vocational training and work experience components, and observing their conduct in carrying out their own job search. TOPS participants who did not contact the job developer on a regular basis, failed to follow through on job leads provided by the job developer or did not execute other assignments as directed, demonstrated that they were not job ready; job developers were unlikely to make job referrals or aggressively pursue potential employers for these candidates. Therefore, how aggressive the job search became depended largely on the clients' own efforts.

JTPA job development practices caused some friction with the WEET staff who had expected that job developers would be more aggressive in finding OJT positions and would tailor them to the interests of individual clients in TOPS, as WEET staff had done in developing the work experience positions. Over time, however, WEET staff also became advocates of the client-initiated job search. In one office, for example, WEET took the initiative and placed TOPS participants for whom JTPA had not found an OJT into a three-week mini-job club run by their own staff. Another WEET office, which split responsibility for OJT placements with JTPA, also placed TOPS participants in a formal job club by the final cycle and used less structured job search activities in previous cycles. One important

difference remained: WEET staff tended to place greater emphasis on the need for structured, formal job search in a group setting, rather than relying on staff-supervised independent job search for the TOPS clients.

The reliance on client-initiated job development in TOPS reflected both resource constraints and the conviction of JTPA staff that client job search is a highly effective placement strategy. However, it has been generally assumed that in an OJT program, because less job-ready applicants will require extra help in order to be hired, staff "marketing" of potential employees -- as well as the availability of a subsidy -- is critical to placing them in jobs. The fact that a substantial number of OJT participants were placed through their own efforts in TOPS raises two concerns. On the one hand, it suggests that many of the TOPS participants may have been employable even without the subsidy, in part because they had gone through the preliminary job preparation stages of the program. For such participants, the subsidy may simply represent an employer bonus. On the other hand, it is possible that more intensive staff efforts would have resulted in higher OJT placement rates, particularly among harder-to-employ participants. The use of client job search does, however, alleviate some of the concerns that an OJT program may prolong the period of welfare receipt and delay job placement because participants are waiting for staff to find them a job rather than making efforts on their own behalf.

2. Characteristics of OJT Participants

Who, in fact, participated in TOPS OJT, through either staff efforts or their own efforts? This question is interesting given the typical assumption underlying OJT placement efforts that the less qualified individuals are harder to place because of employer preferences. The

demographic characteristics of the TOPS OJT participants shed some light on the issue, although the small sample and lack of data on motivation or work maturity render this suggestive rather than conclusive evidence.

What the data indicate is that despite staff concerns that not having a high school education would hurt participants' employment efforts, a substantial proportion of enrollees of all educational levels were placed in OJT positions. (See Table 3.5.) Further, the placement rate for the more educated individuals was not significantly higher than that for the less educated ones.

The fact that 57 TOPS experimentals never participated in OJT because they moved directly into unsubsidized employment within the 12-month follow-up period suggests that the group which did not get OJT may have included the most job-ready candidates. (See Table 3.1.) Interviews with WEET and JTPA staff also indicate that some TOPS participants were reluctant to take jobs that paid enough to move them off the welfare rolls but left them below the poverty level. According to staff, this concern featured prominently in the pre-vocational training discussions of appropriate job paths and household budgeting.

3. Characteristics of the OJT Positions

Although TOPS was targeted to private sector employment, 27 percent of the jobs were in the public or non-profit sector. (See Table 3.6.) This reflected both the rollover from work experience positions in the public or non-profit sector, and the fact that jobs in hospitals or government installations were appealing because they offered relatively higher wages and good benefits.

The OJT positions in TOPS paid, on average, more than the minimum

TABLE 3.5

MAINE

ON-THE-JOB TRAINING PARTICIPATION RATES FOR EXPERIMENTALS,
BY SELECTED CHARACTERISTICS

Characteristic	Ever Participated in OJT (%)
Total Sample	30.6
Age	
24 Years or Less	31.1
25 to 34 Years	28.9
35 to 44 Years	35.0
45 to 69 Years	33.3
Ethnicity	
White, Non-Hispanic	31.5
Black, Non-Hispanic	20.0
Hispanic	0.0
Other	0.0
Degree Received	
None	26.7
General Equivalency Diploma	35.3
High School Diploma	31.0
Marital Status	
Never Married	36.4
Married, Living With Spouse	0.0
Married, Not Living With Spouse	26.2
Divorced or Widowed	29.9
Any Children	
Less Than 6 Years	27.6
Between 6 and 18 Years	31.2
Prior AFDC Dependency	
Two Years or Less	27.2
More Than Two Years	33.2
WEET Status	
Mandatory	30.8
Voluntary	30.7
Employment Status During Quarter Prior to Random Assignment[a]	
Employed	32.6
Not Employed	30.3

(continued)

TABLE 3.5 [continued]

Characteristic	Ever Participated in OJT (%)
Employment Status During Four Quarters Prior to Random Assignment[a]	
Employed	26.8
Not Employed	32.5
Sample Size[b]	297

SOURCE: MDRC Calculations from MDRC Client Information Sheets, WEET Information System data, and JTPA Information System data.

NOTES: All members of the sample are female single heads-of-household.

[a]Calculated from Unemployment Insurance earnings records from the State of Maine.

[b]For selected characteristics, sample sizes may vary up to 10 sample points due to missing data.

TABLE 3.6

MAINE

SELECTED CHARACTERISTICS OF TOPS ON-THE-JOB TRAINING POSITIONS

Characteristic	
Sector of Position (%)[a]	
Private	73.0
Public/Non-Profit	27.0
Hourly Wage Rate (%)[b]	
Less Than $3.35	1.1
$3.35	8.7
$3.36 - $4.00	57.6
$4.01 - $5.00	26.1
$5.01 or More	6.5
Average Hourly Wage ($)[b]	4.04
Scheduled Length of On-the-Job Training Contract (%)	
6-10 Weeks	12.0
11-15 Weeks	21.7
16-20 Weeks	16.3
21-25 Weeks	13.0
26 Weeks	37.0
Average Scheduled Length of On-the-Job Training Contract (Weeks)	19.2
Actual Duration of On-the-Job Training Position (%)[c]	
5 Weeks or Less	8.7
6-10 Weeks	14.1
11-15 Weeks	26.1
16-20 Weeks	13.0
21-25 Weeks	9.8
26 Weeks	28.3
Average Duration of On-the-Job Training Position (Weeks)[c]	16.5
Hours Scheduled to Work Per Week (%)	
20 or Less	5.4
21-30	15.2
31-39	14.1
40	65.2
Average Hours Worked Per Week	36.4

(continued)

TABLE 3.6 (continued)

Characteristic	
Job Classification (%)	
Clerical Occupations	46.7
Secretary, Administrative Clerk	16.3
Receptionist, Telephone Operator	6.5
Billing, Stock, or Mail Clerk	8.7
Clerk Typist, Keypunch Operator	5.4
Bank Teller	3.3
Computer Operator	2.2
Bookkeeper	2.2
Clipping Service Reader	2.2
Service Occupations	25.0
Food Service	13.0
Salesperson, Cashier	6.5
Nurses Aide, Health Care Aide	3.3
Child Care Worker	2.2
Manual Skill Occupations	10.9
Machine Trades	6.5
Seamstress, Tailor	2.2
Electronics Assembler	2.2
Professional and Managerial Occupations[d]	8.7
Other Occupations[e]	8.7
Total Number of On-the-Job Training Positions[f]	92

SOURCE: MDRC calculations from TOPS On-the-Job Training contracts.

NOTES: Distributions may not add to 100.0 percent due to rounding.

Job classifications are based on the U.S. Department of Labor's occupational titles from the Dictionary of Occupational Titles, fourth edition, 1977.

(continued)

TABLE 3.6 [continued]

[a]Information on Sector of Position was unavailable for three On-the-Job Training contracts.

[b]Hourly wage rates are the "starting wage" for each position. Some On-the-Job Training contracts specified increases over time.

[c]"Actual Duration of On-the-Job Training Position" was reported to MDRC by WEET staff.

[d]Includes credit counselor aide, recreational therapist, manager trainee, certified nurse's aide, aerobic dance instructor, customs house broker, counselor, and exercise instructor.

[e]Includes security guard, microfiche duplicator, carpenter's helper, laundry operator, clock repairer, production helper, furniture upholsterer, and floral arranger.

[f]Eighty-nine experimentals participated in TOPS On-the-Job Training; two On-the-Job Training contracts were written for three of these participants. Two experimentals participated in On-the-Job Training under JTPA and are not included in these calculations.

wage.[10] The average hourly OJT starting wage was $4.04 -- just above the TOPS target of $4.00 per hour. It is important to note that wages in Maine are generally low and wages in traditionally "female" occupations -- where most of the TOPS jobs were concentrated -- are particularly low. About half the OJT positions were in clerical areas and another quarter were in service occupations. Non-traditional OJT placements -- amounting to only a small proportion of the OJT placements -- included positions such as clock repairer, upholsterer, carpenter's helper, print shop worker, machine repair trainee, and machine operators of various types.

Employment data from the State of Maine indicate that average weekly wages in the retail and service trades in Maine in 1984 were $144 and $182, respectively.[11] On the assumption of a 40-hour work week and a minimum wage of $3.35, a minimum wage job would pay $134 a week; a $4.00 per hour job would pay $160 a week. (Almost two-thirds of the TOPS OJT positions required a 40-hour work week; only a small proportion were part-time jobs.) Thus, the starting wages of the TOPS participants in OJT seem to be in line with the general wage levels in these occupational fields in the state. They are also comparable to the average starting wage for AFDC recipients placed by WEET and TOPS in unsubsidized employment in 1983 and 1984.[12]

A review of the job descriptions in the OJT contracts indicates that the training potential of most of the positions was limited; generally, the positions appeared to offer the type of training associated with familiarizing any new employee with the routines of a particular work setting. The OJT jobs also appeared to provide little opportunity for advancement. For example, 13 percent of the positions were for jobs as short order cooks, counter help, food preparers in commercial establishments (some of them

fast food restaurants) or institutional residences. Of the clerical positions, more were clerk/typist, receptionist, and similar positions than more demanding secretarial jobs, although one woman was training as a legal secretary and another was in a bookkeeper's position.

Under JTPA rules, the length of the OJT was tied to the wage level -- the higher the wage, the longer the permissible training period, up to the six-month maximum. WEET practice was more flexible on training length. The average scheduled duration of the OJT positions was 19 weeks; 37 percent were written for the maximum length of six months or 26 weeks.

4. Monitoring the OJT Positions

Once TOPS clients were placed in an OJT position, they had less contact with program staff than in the earlier components, and were treated much like other working clients by WEET and JTPA staff. The OJT positions were generally monitored by the JTPA job developers. This typically consisted of a monthly telephone call to the employer or the participant; in a few locations, staff were scheduled to make one or two visits to the worksite during the OJT period. In general, WEET caseworkers left it to the OJT participants to contact them about any problems they were experiencing.

Provision of WEET support services also declined early in the OJT phase. WEET provided child care assistance and transportation money only during the first month of the OJT, and a number of staff indicated they did not like to provide the maximum during that period because they did not want clients to become too dependent on it. After the first month, child care had to be covered by the Social Services Block Grant funding available through Title XX of the Social Security Act or other sources; slots paid

through Title XX funds were not always available when clients needed them. Medicaid eligibility, however, continued throughout the OJT phase, even if earnings reduced the AFDC grant to zero.

5. Client Performance in OJT

Two important criteria of success in OJT are whether clients retain their positions for the duration of time stated in the contract, and whether they "roll over" into permanent unsubsidized jobs with the same employer. State-reported data from Maine indicated relatively high completion and rollover rates for the TOPS participants who were placed in OJT positions: 69 of the 89 individuals for whom OJT contracts were written completed the terms of the contract, and 63 remained in employment with the same employer after the OJT period had ended. (See Table 3.7.) Those who were retained generally received a wage increase.

Compared to interim state-reported data from grant diversion funded OJT programs in other states, the rollover and completion rates in the OJT component of TOPS appear to be relatively high.[13] These other programs differed from TOPS, however, in that although they placed less emphasis on targeting clients with previous welfare experience and little job experience, they also did less screening for appropriateness and did not provide the intensive job-preparation training before OJT placement. Staff in the other states believed that the lack of post-placement counseling and other support services lowered the completion and rollover rates in OJT.

Information on the 22 TOPS OJT contracts that were not completed indicated that 13 participants voluntarily quit their jobs; five were fired; two moved to another area; and two were in businesses which folded or laid staff off. Situational problems played a large part in participants'

TABLE 3.7

MAINE

CONTRACT OUTCOMES
FOR TOPS ON-THE-JOB TRAINING PARTICIPANTS

Performance Indicator	Number	Percent
Completed an On-the-Job Training Contract[a]	69	77.5
Continued in Employment with an On-the-Job Training Employer	63	70.8
Participated in TOPS On-the-Job Training[b]	89	

SOURCE: MDRC calculations from WEET Information System data and reports to MDRC by WEET staff.

[a]Three of these contracts are for individuals who also had an On-the-Job Training contract which they did not complete.

[b]Eighty-nine experimentals participated in TOPS On-the-Job Training. Two experimentals participated in On-the-Job Training under JTPA and are not included in these calculations.

inability to finish the training period according to schedule. The 13 individuals who quit their jobs gave the following reasons for their action: six had problems with child care, transportation or health; two were experiencing family or emotional problems; and four were dissatisfied with the job. One quit because she thought she was not doing well enough, although the employer had no complaints. Most of the participants who did not finish the contract period had been working for some weeks when the job ended: the average was 8.8 weeks; the range was between one and 21.5 weeks.[14]

More about the qualifications of the TOPS participants and their performance on the job can be learned from interviews with the OJT employers. Interviews conducted by MDRC staff with 14 supervisors of participants placed in OJT between May and November 1984 indicate that most participants were judged to be as productive as any new employee, and were generally rated as high or higher than the average new employee on attendance and punctuality, dress, ability to accept criticism and complete tasks as directed.[15] The OJT supervisors rated the TOPS employees as adequate or more than adequate in reading, writing and arithmetic skills when they started working, but a minority of the participants were judged inadequate in general skills like communication, cooperation and working without supervision. Ten of the 14 supervisors said the work required specific occupational skills, and three found the TOPS employees lacking in these skills when they began work. Those participants judged adequate as well as those judged inadequate improved their communication and occupational skills during the training period.

6. The Administration of Grant Diversion Funding

The availability of the diverted funds from AFDC grants was an important source for covering the cost of the subsidized OJT wage in TOPS. It had been estimated -- based on assumptions of participants' likely earnings, family size, deductible expenses and the state's standard of need -- that the diverted funds would cover the 70 percent of the employer subsidy for which WEET was responsible. In actuality, grant diversion funded only 51 percent of the cost of the subsidized wage.[16] (See Table 3.8.) Regular WEET funds were used to fill the gap.

Maine staff involved in processing the grant diversion wage pool and reimbursing employers described the mechanics of grant diversion as a "bookkeeping process" no more complicated than other accounting procedures. There were, however, some problems in the administration of the wage pool during the first year of grant diversion. Some of these were particular to the procedures set up in Maine, where the AFDC benefit records and the grant diversion accounts were not part of the same automated system. Others provide useful caveats for all states interested in operating grant diversion.

A particularly serious problem resulted from the practice of beginning grant diversion at the start of the OJT job. Because of retrospective budgeting, the AFDC grant level was not actually affected until two months after the new earnings began; thus, by diverting the funds in the first months of the OJT job, relatively little money was diverted into the wage pool. To correct for this, staff developed a system to divert the funds during the "effective grant diversion period," which they defined as beginning two calendar months after the start of the OJT job, and

TABLE 3.8

MAINE

GRANT DIVERSION CALCULATIONS
FOR TOPS ON-THE-JOB TRAINING PARTICIPATION

Total Calculated Wage Costs ($)[a]	223,135.90
Total Calculated Employer Subsidies ($)[b]	111,567.95
Total Grant Diverted Amount ($)	57,050.00
Contracted Grant Diversion Coverage of Employer Subsidies (%)	70.0
Actual Grant Diversion Coverage of Employer Subsidies (%)	51.1
Sample Size[c]	89

SOURCE: MDRC calculations from TOPS On-the-Job Training contracts, WEET grant diversion records, and TOPS operating contract between WEET and JTPA.

NOTES: [a]Wage costs are calculated as On-the-Job Training contract starting wage multiplied by On-the-Job Training contract scheduled hours per week, the product of which is multiplied by actual length-of-stay (in weeks) according to WEET program staff records.

[b]Employer subsidies are calculated as 50% of wage costs.

[c]Eighty-nine experimentals participated in TOPS On-the-Job Training. Two experimentals participated in On-the-Job Training under JTPA and are not included in these calculations.

continuing for two months after the OJT period ended. (These and other issues are discussed in detail in Appendix B.)

* * * * *

The TOPS planners had anticipated that the sequence of activities provided in TOPS would enable the participants to obtain better-quality jobs -- jobs paying higher than the minimum wage, in the primary labor market, and offering opportunities for stable employment or advancement -- that would enable the new employees to leave the welfare rolls. It was also hoped that the OJT placements would include positions in non-traditional jobs for women. As discussed, some but not all of these criteria were met in the OJT placements. Whether the jobs were better than TOPS enrollees could have gotten without TOPS training can only be answered by comparing the employment and earnings experiences of the experimentals with those of the controls, an issue addressed in Chapter V. Chapter IV prepares for the discussion of TOPS impacts by describing the experiences of the control group.

CHAPTER IV

ENVIRONMENT OF THE DEMONSTRATION AND THE CONTROL GROUP EXPERIENCE

The experiences of individuals given the opportunity to participate in a program like TOPS can only be appropriately evaluated in the context in which they occurred. Two dimensions are particularly relevant. The first is the economic and service environment in which the demonstration took place. In particular, the impacts of welfare employment programs can have very different implications depending on the labor market conditions and the AFDC eligibility and benefit provisions during the period of the demonstration.

The second dimension is what the experimentals would have done in the absence of the program. Research confirms that there is substantial turnover among the AFDC population -- in and out of the labor market and on and off the welfare rolls -- that is unrelated to a particular program activity.[1] There are also employment-related activities available that have no connection with the program being evaluated. The experience of the control group, as noted in Chapter II, is used as the benchmark to measure the effects of normal caseload turnover and the availability of other employment-related activities in the absence of the demonstration.

This chapter begins by providing an overview of the labor market conditions and AFDC eligibility and benefit provisions in Maine during the demonstration period. It then discusses the employment-related activities in which controls participated, and their employment and welfare experiences. This discussion provides the context for the impact results

presented in Chapter V.

I. The Environment of the Demonstration

The 1980s saw changes in both the economic and welfare policy environment in Maine. In 1980, the unemployment rate in Maine was somewhat higher than the national average (7.8 versus 7.1 percent), the median family income in Maine was lower than the national average ($16,167 versus $19,587), and more of Maine's population was living below the poverty level than in the nation as a whole (almost 15 versus 13 percent).[2] Between 1980 and the start of the demonstration in 1983, the unemployment rate rose in Maine, but less rapidly than the national rate, and the proportion of persons living below the poverty level in Maine dropped despite a rising rate nationwide.[3] Conditions were improving in Maine relative to the national picture.

A. AFDC Eligibility

The AFDC program in Maine has been characterized historically by a higher-than-average standard of need, average benefit levels and a relatively high proportion of AFDC recipients combining welfare with work. In March 1979, for example, 23.2 percent of the Maine caseload worked and received welfare, compared with 13 percent nationwide.[4] Passage of the Omnibus Budget Reconciliation Act (OBRA) of 1981 led, both in Maine and nationally, to a reduction in the proportion of the AFDC caseload that worked. The proportion of Maine welfare recipients who worked, for example, had dropped to 12.6 percent in January of 1983.[5]

Three OBRA provisions affected the work incentives in the AFDC program. One imposed a gross income test for AFDC eligibility, making

families with income exceeding 150 percent of a state's need standard ineligible for AFDC. In addition, OBRA changed the incentive to work by capping child-care deductions and standardizing the allowable deductions for work expenses at $75 for full-time workers and $38 for part-time workers. The latter change was beneficial to working recipients with work expenses below the standard, but detrimental to those with higher expenses. OBRA also changed the income disregard provisions for working recipients. Prior to OBRA, the following items were subtracted from total earnings to calculate countable earnings: the first $30 of earnings; one-third of the remaining earnings; and then deductions for child care and work expenses. A recipient with earned income, therefore, could keep a certain proportion of any earnings. OBRA eliminated the "thirty and a third" disregard after four months of earnings and made the one-third disregard apply to net rather than gross income. These changes reduced the financial incentives for AFDC recipients to work.[6]

Maine responded to these changes by modifying its grant calculation procedures to allow recipients to keep more of their income. The maximum grant in Maine has traditionally been set at 72.5 percent of the AFDC need standard. Prior to 1983, countable income was subtracted from this maximum grant level and the difference was the AFDC benefit amount.[7] However, since 1983, instead of being subtracted from the maximum grant (72.5 percent of need), countable income is subtracted from the full need standard (i.e., 100 percent of need). The grant amount is either that difference or the maximum grant, whichever is lower. The net result of this change is to permit recipients to have countable income up to 27.5 percent of the standard of need before losing any benefits. Maine is one of only a few

states which calculate AFDC payments in this manner. The effect is to make it more likely that individuals will mix work and welfare.

At the beginning of random assignment (October 1983), the standard of need for a family with one child -- the size of the typical TOPS sample member's family -- was $349 and the maximum grant for such a family was $243.[8] By January of 1987, the standard of need for a family with one child had increased to $416 and the maximum grant -- still 72.5 percent of need -- was $301.[9] Compared to other states, Maine's standard of need remained relatively high throughout the demonstration period. By 1986, it was the 14th highest in the nation.[10]

B. Labor Market Conditions

During the demonstration, unemployment was decreasing in all areas of the state; the state's unemployment rate dropped from 9 percent in 1983 to 5.3 percent in 1986. The unemployment rate for women remained just below the state-wide rate throughout this period.[11] Important differences in regional and seasonal employment persisted, however; the rate in the northern part of the state (Region V) ranged from 5.7 to 12.5 percent compared to a 2.3 to 5.7 percent range in the more urban southern region (Region I).

The minimum wage in Maine also rose a number of times during the demonstration period, as noted in Chapter III. At the beginning of random assignment, the minimum wage was equal to the federal minimum of $3.35 per hour. On January 1, 1985, the state minimum wage was raised to 10 cents above the federal level; on January 1, 1986, it was raised another 10 cents.[12] Since the end of the TOPS demonstration it has been raised still higher.

II. Employment and Training Activities of Controls

TOPS sample members were recruited and assessed by the WEET worker who had caseload responsibility for them. (WEET caseloads were allocated to case workers either geographically or alphabetically.) WEET staff were permitted to tell control group members about alternative services available through WEET and other agencies immediately after informing them of their research status. From this point, TOPS controls were treated like any other WEET clients who showed interest in participating in employment-related activities. Controls were eligible to receive services through WEET, JTPA, or other local programs, including individual TOPS-like activities though not the full TOPS sequence and not as part of a special group. Staff assessed the controls' employment needs, provided counseling, referred them to other training or education providers, and helped to arrange employment or training opportunities and financial assistance or other support services.

Rates of participation in employment-related activities of controls are compared with those of experimentals in Table 4.1, as reflected in participation records from the automated tracking systems of WEET and JTPA. It is worth stressing again that, unlike other MDRC welfare employment evaluations, the TOPS evaluation focuses on a new program within the state's WIN Demonstration system, not the whole system. In the TOPS evaluation, the control group members are the ones receiving the regular WIN Demonstration services.

Just over half (52 percent) of the control group participated in some employment-related activity during the full follow-up period. This parti-

TABLE 4.1

MAINE

PARTICIPATION IN WEET AND JTPA SERVICES
OVER THE ENTIRE FOLLOW-UP PERIOD, BY RESEARCH GROUP

	Experimentals		Controls	
Performance Indicator	Number	Percent	Number	Percent
Participated in Any Activity	276	92.9	76	51.7***
Participated in Either Pre-Vocational Training, Work Experience or On-the-Job Training	266	89.6	33	22.4***
Participated in Pre-Vocational Training	263	88.6	18	12.2***
Participated in Work Experience	201	67.7	13	8.8***
Participated in On-the-Job Training	91	30.6	7	4.8***
Participated in Group Job Search	26	8.8	9	6.1
Participated in Individual Job Search	92	31.0	35	23.8
Participated in Education	18	6.1	21	14.3***
Participated in Training	9	3.0	17	11.6***
Sample Size	297		147	

SOURCE: MDRC calculations from WEET Information System and JTPA Information System data.

NOTES: Sample members have between 11 and 26 months of participation follow-up data, depending on their date of random assignment. That is, sample members randomly assigned early in the demonstration have more follow-up than sample members randomly assigned later in the demonstration.

Participation is defined as attending an activity for at least one day.

Differences between research groups are statistically significant using a chi-square test at the following levels: * = 10 percent; ** = 5 percent; *** = 1 percent.

cipation rate is considerably higher than the participation rates of the control groups in other state welfare employment initiatives recently evaluated by MDRC -- as high indeed as the participation rates of experimentals in these other evaluations -- and reflects two conditions unique to the TOPS evaluation. First, because TOPS represented only one option among an array of WEET services, more alternative services were likely to be available to controls in Maine than in other states. Second, the recruitment and screening process made it more likely that controls would seek out services in Maine than elsewhere, and that WEET and JTPA staff would be willing to work with them.

The TOPS control group, however, did not participate in activities to the same degree as experimentals, almost 93 percent of whom participated in at least one activity over the full follow-up period. In addition, the control group's activities were less intensive on average. For example, 5 percent participated in on-the-job training, 9 percent participated in work experience, and 12 percent participated in pre-vocational training. These are considerably lower proportions than the proportions of experimentals participating in the various TOPS components.

In addition, although 22 percent of controls participated in at least one activity similar to a TOPS component, only 3 percent participated in more than one, compared with 43 percent of experimentals participating in two, and 27 percent participating in all three of the TOPS components. (See Tables 4.1 and 4.2.) The proportion of controls who participated in other education and training activities was higher than among experimentals; this is not surprising given that experimentals were not supposed to engage in such activities except for very limited remedial education. A

TABLE 4.2

MAINE

PARTICIPATION PATTERNS IN PRE-VOCATIONAL TRAINING, WORK EXPERIENCE, AND ON-THE-JOB TRAINING OVER THE ENTIRE FOLLOW-UP PERIOD, BY RESEARCH GROUP

	Experimentals		Controls	
Performance Indicator	Number	Percent	Number	Percent
Participated in Pre-Vocational Training Only	57	19.2	14	9.5**
Participated in Work Experience Only	1	0.3	11	7.5***
Participated in On-the-Job Training Only	0	0.0	3	2.0[a]
Participated in Pre-Vocational Training and Work Experience Only	117	39.4	1	0.7***
Participated in Pre-Vocational Training and On-the-Job Training Only	8	2.7	3	2.0
Participated in Work Experience and On-the-Job Training Only	2	0.7	1	0.7[a]
Participated in the TOPS Sequence (Pre-Vocational Training, Work Experience, and On-the-Job Training)	81	27.3	0	0.0***
Did Not Participate in Pre-Vocational Training, Work Experience, or On-the-Job Training	31	10.4	114	77.6***
Sample Size	297	100.0	147	100.0

SOURCE: MDRC calculations from WEET Information System and JTPA Information System data.

NOTES: Sample members have between 11 and 26 months of participation follow-up data, depending on their date of random assignment. That is, sample members randomly assigned early in the demonstration have more follow-up than sample members randomly assigned later in the demonstration.

Participation is defined as attending an activity for at least one day.

Differences between research groups are statistically significant using a chi-square test at the following levels: * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Chi-square test inappropriate due to low cell frequencies.

sense of the relative intensity of job-related activity of the two groups is conveyed by comparing the per participant costs of the TOPS components for experimentals with the per participant costs of the analogous activities for controls. The per participant operating cost of the work experience component for experimentals was $390, compared with $189 for the work experience of controls. The per participant operating cost of the OJT component for experimentals was $637, compared with $301 for the OJT experience of controls.[13]

The trends in cumulative participation rates for controls are shown in Figure 4.1. Most of the control activity had started by the fifth month after random assignment. Job search is the only activity that continued to grow, if slowly, throughout the observation period.

That such a substantial proportion of the control sample participated in employment-oriented activities has important implications for interpreting the impact results presented in Chapter V. The experimental-control differences presented in that chapter are measuring the effectiveness of TOPS compared to a WEET program which offered a broader array of services, but services that were typically less intensive than TOPS provided.

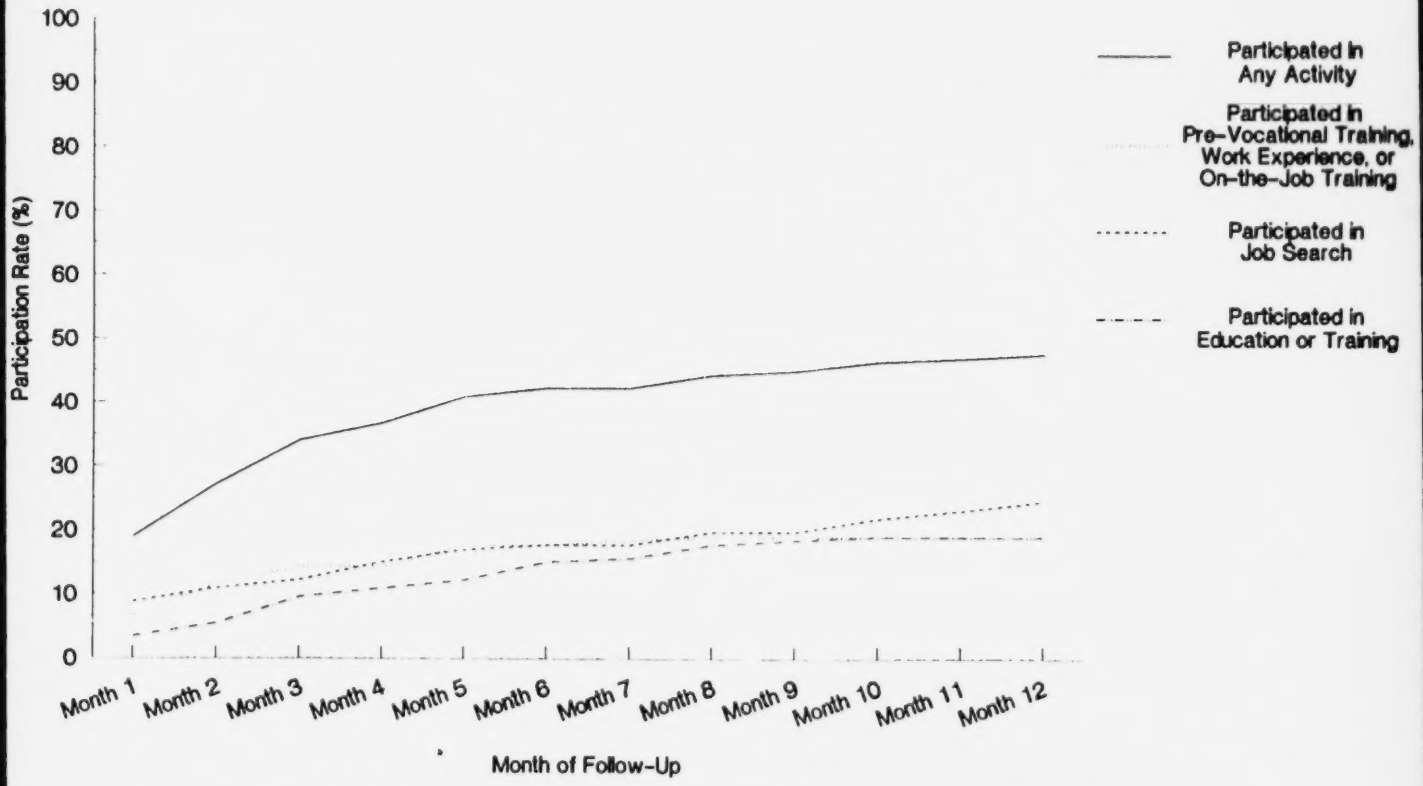
C. Earnings and AFDC Receipt Among Controls

Figure 4.2 shows patterns of employment and AFDC receipt for the control group over the follow-up period. As can be seen, during the quarter of random assignment the majority of controls had no earnings and received some AFDC. The next largest group had some earnings and received some AFDC. That virtually all controls received some AFDC at random assignment is a reflection of the eligibility requirement that women had to have been on AFDC for the past six months. As the demonstration progressed, the

FIGURE 4.1

MAINE

TRENDS IN CUMULATIVE PARTICIPATION RATES FOR CONTROLS, BY TYPE OF ACTIVITY



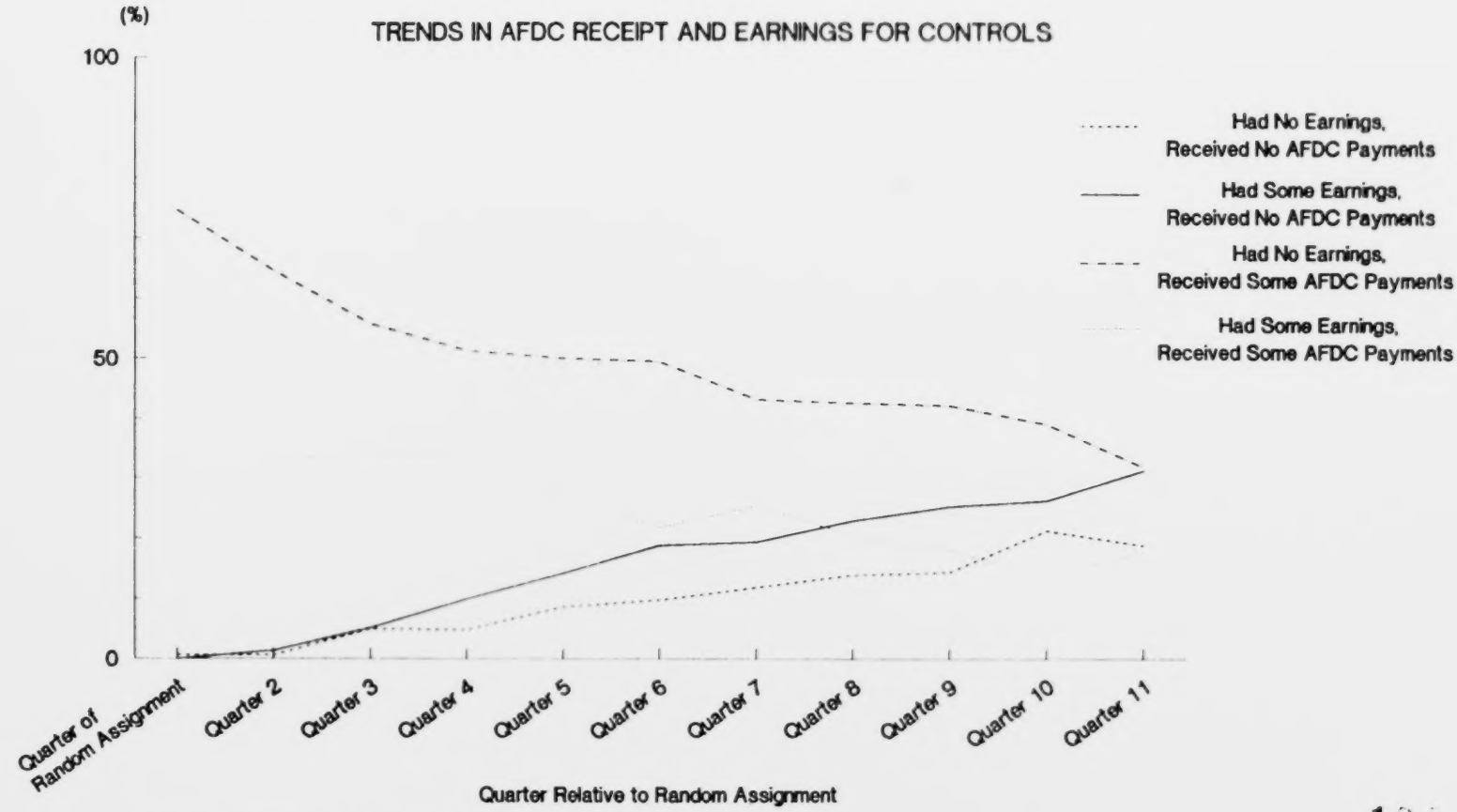
SOURCE: MDRC calculations from WEET Information System and JTPA Information System data.

NOTES: See Table 3.1.

FIGURE 4.2

MAINE

TRENDS IN AFDC RECEIPT AND EARNINGS FOR CONTROLS



SOURCE AND NOTES: See Table C.2.

proportion of controls who had no earnings and received some AFDC decreased relatively steadily. The proportion who had some earnings and received some AFDC increased over the first two quarters, declined over the next four, then after a slight increase in quarter 7, declined through all but the last quarter. The proportion who had some earnings and received no AFDC increased relatively steadily throughout the period. The proportion who had no earnings and received no AFDC increased gradually over the demonstration, as women married, left the state or left the rolls for other reasons.

These trends can be attributed to several factors. In part, they are due to the normal flow of welfare recipients off the rolls and into employment. During the TOPS demonstration this flow increased with the steady improvement of the labor market. The TOPS control group (in common with the experimental group) was screened for motivation and potential barriers to participation and was, in fact, highly served. Therefore, some of the effect on employment and welfare receipt is almost certainly due to increased employability through activity in the other employment, education or training services to which control group members had access. These are the trends with which the outcomes for the experimentals are compared in Chapter V to yield the estimated net impacts of the TOPS program sequence.

CHAPTER V

IMPACT OF TOPS

The primary policy goal of the Maine TOPS program was to help AFDC women with histories of welfare dependency and little work experience obtain jobs that would pay enough to make them less dependent on welfare. This chapter examines the impact of TOPS on the employment and earnings of sample members, the extent to which they received welfare, and the amounts of welfare received. Chapter VI examines whether the benefits of the program outweighed the costs.

The random assignment methodology of the TOPS evaluation makes it possible to achieve unbiased estimates of TOPS impacts by measuring differences in average employment and welfare outcomes between the experimental and control groups.[1] In this analysis, experimental-control differences are judged to be statistically significant if there is, at most, one chance in ten that the observed impact could have occurred in the absence of a real program effect.[2]

Before the results are presented, it is important to note several considerations that must be kept in mind while interpreting the results. First, although most TOPS sample members were on welfare and not working at the time of assignment, the screening process yielded a group of women who were better educated and had fewer barriers to participation than the typical WIN registrant. Second, the evaluation design does not permit a comparison of TOPS versus no program. The control group engaged in substantial education- and employment-related activity. The impact

estimates, therefore, measure the effects of the TOPS sequence versus the effects of WEET and other activities engaged in by many controls. Third, the research sample on which the results are based includes only 444 sample members. Small sample sizes reduce the chances that outcome differences will be statistically significant.[3]

Fourth, impact estimates average net outcomes for all experimentals including the small share of experimentals who did not participate in the TOPS sequence. Thus, they do not measure the impacts of receiving TOPS services but rather of assignment to TOPS services.[4] Fifth, the impacts are estimated for all sample members including those with zero earnings or zero welfare income.

Sixth, earnings data include OJT earnings and employment data include OJT employment. Seventh, as noted in Chapter II, prior earnings of controls were higher than those of experimentals. Although the methodology used to estimate program impacts is designed to adjust for differences in characteristics at random assignment, impacts may be slightly underestimated.

Finally, the earnings data were collected by calendar quarter. The calendar quarter during which random assignment occurred can include earnings before random assignment. The AFDC monthly payments data were aggregated into calendar quarters in order to match the earnings data. Therefore, the quarter of random assignment is not counted as a follow-up quarter for cumulative impact estimates.

The results show that TOPS had sustained positive impacts on earnings over the entire follow-up period (quarters 2 through 11). TOPS led to a statistically significant average earnings increase of $1,745 per experi-

mental, or 31 percent more than average control earnings of $5,599.

Since the earnings measure includes the earnings received by TOPS experimentals for their OJT jobs, it is important to divide the overall earnings impacts into in-program and post-program impacts. During the period when most experimentals were in TOPS (quarters 2 through 6) there was no statistically significant earnings impact, although experimentals did earn $555 more than controls. The earnings pattern by quarter does show statistically significant earnings increases during the latter part of the in-program period, when the OJT component would have been in full operation. Over the period when most experimentals were no longer in the program (quarters 7 through 11), TOPS produced a statistically significant increase in average earnings per experimental of $1,190, or 36 percent more than average control earnings over the same period of $3,298.

Experimentals were employed for more follow-up quarters than controls, 4.69 quarters versus 4.21 quarters over the follow-up period as a whole. The difference, although reflecting an 11 percent increase for experimentals, was not statistically significant. More experimentals than controls were employed in each of the follow-up quarters except the first two, although most of these differences were also not statistically significant, perhaps because of small sample sizes.

TOPS did not lead to reductions in welfare receipt. Indeed, more experimentals than controls received welfare in most quarters. These differences were small, however, and again not statistically significant.

The combination of positive earnings impacts and no reductions in welfare yielded statistically significant and substantial increases in total measured income (earnings plus AFDC payments). Over the whole

follow-up period, total measured income per experimental increased by $1,915, or 16 percent of the control group average of $12,198. Over the in-program period, average measured income per experimental increased by $675, or 11 percent of the control group average; over the post-program period, the increase per experimental was $1,240, or 20 percent of the control group average.

II. Impacts on Employment and Earnings

This section discusses the impacts of TOPS on employment and earnings. Results are presented by quarter and for the full follow-up period (quarters 2 to 11). They are also shown for quarters 2 to 6 and quarters 7 to 11, to separate any employment and earnings effects that include participation in the OJT component from the employment and earnings impacts that occur after the program. The dividing line between the in-program and the post-program period is set at the end of the sixth quarter because more than 94 percent of the OJT contracts had ended by then and all but two of the remainder had ended by quarter 7. (See Table 5.1.)

A. Employment

Two measures of employment were used: the percentage of sample members who were ever employed in a quarter and during the different follow-up periods, and the average number of quarters sample members were employed. The results are shown in Table 5.2. Note that the numbers in the last column indicate the probability that the experimental-control difference could have been observed in the absence of a real program effect. At the 10 percent significance level, the number in the last column is 0.100 or

TABLE 5.1

MAINE

END OF PARTICIPATION IN ON-THE-JOB TRAINING,
FOR ON-THE-JOB TRAINING PARTICIPANTS

Performance Indicator	Number	Percent	Cumulative Percent
Last Participated in On-the-Job Training			
Quarter of Random Assignment	0	0.0	0.0
Quarter 2	2	2.2	2.2
Quarter 3	19	21.3	23.6
Quarter 4	26	29.2	52.8
Quarter 5	26	29.2	82.0
Quarter 6	11	12.4	94.4
Quarter 7	3	3.4	97.8
Quarter 8	1	1.1	98.9
Quarter 9	1	1.1	100.0
Quarter 10	0	0.0	100.0
Quarter 11	0	0.0	100.0
Sample Size[a]	89		

SOURCE: MDRC calculations from WEET Information System data and TOPS On-the-Job Training contracts.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

[a]Eighty-nine of 297 experimentals participated in TOPS On-the-Job Training. Two experimentals participated in On-the-Job Training under JTPA and are not included in these calculations.

TABLE 5.2

MAINE

IMPACTS OF THE TOPS PROGRAM ON EMPLOYMENT

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever Employed [%]				
Quarters 2-11[a]	81.8	80.2	1.6	0.680
Quarters 2-6[a]	71.2	65.6	5.6	0.237
Quarters 7-11	68.7	65.3	3.4	0.472
Average Number of Quarters with Employment				
Quarters 2-11[a]	4.69	4.21	0.48	0.175
Quarters 2-6[a]	2.16	2.00	0.16	0.375
Quarters 7-11	2.52	2.21	0.32	0.141
Ever Employed [%]				
Quarter of Random Assignment	16.4	24.7	-6.2**	0.033
Quarter 2	23.5	34.8	-11.3**	0.012
Quarter 3	42.8	39.3	3.5	0.484
Quarter 4	52.1	43.8	8.3	0.109
Quarter 5	49.9	41.3	8.6*	0.090
Quarter 6	47.9	40.7	7.2	0.161
Quarter 7	50.4	45.0	5.4	0.287
Quarter 8	50.2	43.4	6.9	0.179
Quarter 9	50.6	43.4	7.1	0.161
Quarter 10	50.7	39.7	11.1**	0.031
Quarter 11	50.4	49.3	1.1	0.833
Sample Size	297	147		

SOURCE: MDRC calculations from State of Maine AFDC and Unemployment Insurance earnings records.

NOTES: These calculations include sample members not employed and sample members not receiving AFDC. Experimental and control averages are regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members (see Appendix Table C.1 and Appendix D). There may be some discrepancies in sums and differences due to rounding.

A two tailed t-test was applied to each difference between experimental and control groups. Statistical significance levels are provided in the column labeled "p" and are emphasized as follows: * = 10 percent; ** = 5 percent; *** = 1 percent.

[a]Quarter 1, the quarter of random assignment may contain some income from the period prior to random assignment and is therefore excluded from cumulative outcomes.

less. By this standard, for example, the difference in employment rates in the fourth quarter is near to statistical significance.

TOPS had no statistically significant impacts either on the percentage of experimentals ever employed or on the average number of quarters experimentals were employed over the 11-quarter follow-up period, the in-program period, or the post-program period. For the follow-up period as a whole, 81.8 percent of experimentals were employed at some point versus 80.2 percent of controls, for a not statistically significant impact of 1.6 percentage points. For both the in-program and post-program periods, the cumulative impacts were larger but still not statistically significant: 5.6 percentage points on a control average of 65.6 percent for the in-program period and 3.4 percentage points on a control average of 65.3 percent for the post-program period.

Experimentals were more likely to be employed than were controls in every quarter except the first two (when experimentals were likely to be in the pre-employment components of the TOPS sequence). In quarters 5 and 10, the employment impacts were statistically significant and in several of the other quarters the increases were not far from being significant (as indicated by the relatively low probabilities in the last column of Table 5.2). In three of five post-program quarters, these employment rate impacts were at least 6.9 percentage points.

As is to be expected from the quarterly employment-rate impacts, the experimentals were employed in more quarters than were controls. For the follow-up period as a whole, the experimentals were employed on average for 4.69 quarters versus 4.21 quarters for controls, yielding a not statistically significant difference of almost half of a quarter or 11 percent.

During the in-program period, experimentals had 0.16 more quarters with employment than controls, for an 8 percent impact. During the post-program period, experimentals had 14 percent more quarters with employment than controls. Perhaps because of the small sample size, these impacts were not statistically significant.

B. Earnings

TOPS had positive impacts on earnings over the full follow-up period and over the post-program period. (See Table 5.3.) Over the full follow-up period, experimentals earned $7,344, or 31 percent more than controls. This is an increase of about $58 a month. Over the post-program period the experimentals earned $4,489, or 36 percent more than controls. This is an increase of about $79 a month. During the in-program period, experimentals earned 24 percent more than controls, an increase of about $555. This difference was not quite statistically significant at the 10 percent level.

The pattern of earnings by quarter shows the expected reductions for experimentals relative to controls in the early quarters, as experimentals went through the pre-OJT part of the TOPS sequence -- a relative earnings reduction that was statistically significant in the second quarter. By the fourth quarter, experimentals were earning $158 (or 30 percent) more than controls. The positive earnings impact increased in the fifth quarter to 51 percent of the control group average; it dropped back in the sixth quarter to 30 percent, then fluctuated between about 29 and 43 percent through the rest of the follow-up period. Figure 5.1 summarizes employment and earnings outcomes by quarter.

How are these employment and earnings patterns explained? In particular, what can be said about the role of the OJT component? Since

TABLE 5.3

MAINE

IMPACTS OF THE TOPS PROGRAM ON EARNINGS

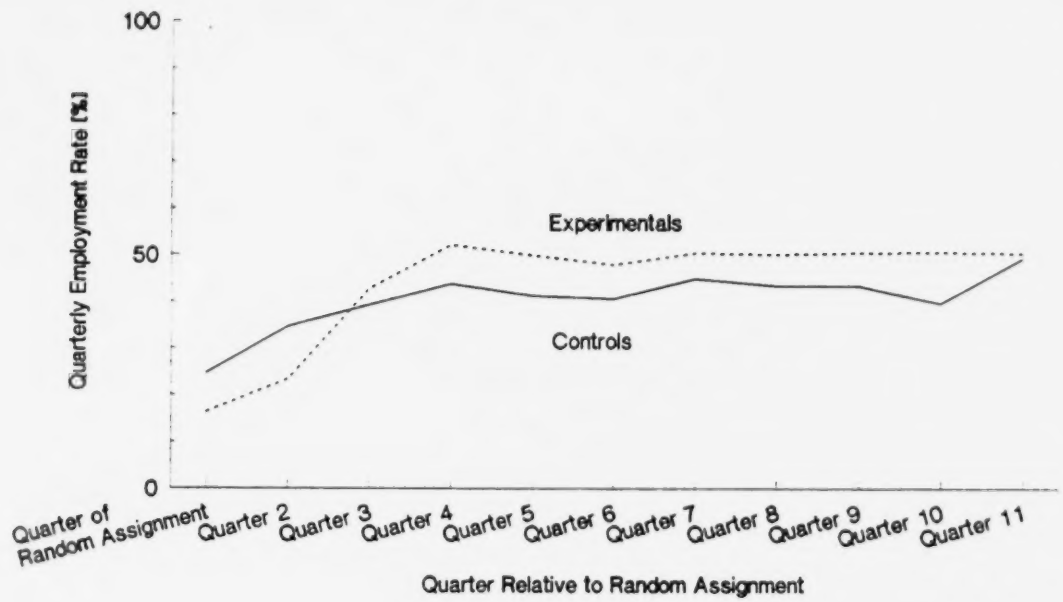
Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Average Total Earnings [$]				
Quarters 2-11[a]	7344.00	5599.17	1744.83**	0.027
Quarters 2-6[a]	2855.39	2300.89	554.50	0.104
Quarters 7-11	4488.61	3298.28	1190.33**	0.020
Average Total Earnings [$]				
Quarter of Random Assignment	70.97	108.74	-37.78	0.154
Quarter 2	172.65	288.52	-115.87**	0.022
Quarter 3	535.12	436.18	98.94	0.267
Quarter 4	686.94	528.54	158.40*	0.078
Quarter 5	715.91	475.37	240.54**	0.011
Quarter 6	744.78	572.28	172.50*	0.093
Quarter 7	839.99	601.23	238.76**	0.027
Quarter 8	881.97	662.55	219.42**	0.048
Quarter 9	917.52	668.60	248.92**	0.032
Quarter 10	915.73	641.63	274.10**	0.021
Quarter 11	933.40	724.28	209.13*	0.085
Sample Size	297	147		

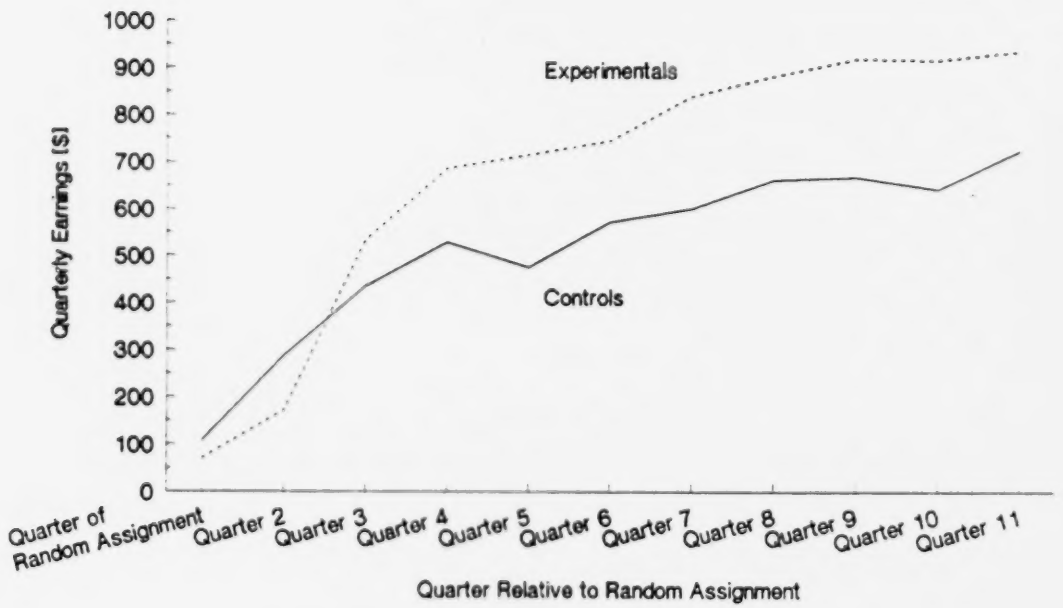
SOURCE AND NOTES: See Table 5.2.

FIGURE 5.1

MAINE

IMPACTS OF THE TOPS PROGRAM ON EMPLOYMENT AND EARNINGS





SOURCE AND NOTES: See Tables 5.2 and 5.3.

there was no separate random assignment to TOPS with and without the OJT component, it is not possible to disentangle the separate role OJT played in TOPS earnings impacts. However, Table 5.4 shows the pattern of participation in OJT in relation to the employment experience of experimentals. The proportion of experimentals participating in OJT peaked in quarter 3 at 23 percent. The proportion participating in OJT was almost as high in quarter 4 at 20 percent.

The OJT participation rates in Table 5.4 are consistent with the rising trends in employment and earnings among experimentals in quarters 3 and 4. After quarter 4 OJT participation fell off rapidly but overall employment did not. Thus, as OJT contracts ended, OJT employment declined as a fraction of total employment. Chapter III documents that, in fact, 7 out of 10 OJT placements rolled over into regular employment. The impact results are consistent with this finding.

To what extent did TOPS affect the timing of employment? Table 5.5 sheds some light on this issue by showing the quarter of first employment for experimentals and controls. As can be seen, more controls than experimentals got their first jobs in the first two quarters. These, as noted, were the quarters when experimentals were most active in the pre-OJT TOPS components. Substantially more experimentals than controls got their first jobs in quarter 3, reflecting the effect of OJT placements. The results after quarter 4 show that more controls than experimentals got their first jobs in the later quarters. Since experimentals had higher employment rates than controls in the later quarters, this evidence indicates that they either kept the jobs they had obtained earlier or got other jobs.

TABLE 5.4

MAINE

ON-THE-JOB TRAINING PARTICIPATION
AND EMPLOYMENT STATUS
FOR EXPERIMENTALS

Follow-Up Period	All Employed		On-the-Job Training Participants[a]		On-the-Job Training Participants as a Percent of All Employed [%]
	Number	Percent of All Experimentals	Number	Percent of All Experimentals	
Quarters 2-11[b]	243	81.8	89	30.0	36.6
Quarters 2-6[b]	211	71.0	87	29.3	41.2
Quarters 7-11	203	68.4	5	1.7	2.5
Quarter of Random Assignment	47	15.8	4	1.3	8.5
Quarter 2	69	23.2	24	8.1	34.8
Quarter 3	127	42.8	68	22.9	53.5
Quarter 4	154	51.9	60	20.2	39.0
Quarter 5	146	49.2	39	13.1	26.7
Quarter 6	139	46.8	14	4.7	10.1
Quarter 7	148	49.8	4	1.3	2.7
Quarter 8	147	49.5	2	0.7	1.4
Quarter 9	148	49.8	1	0.3	0.7
Quarter 10	149	50.2	0	0.0	0.0
Quarter 11	148	49.8	0	0.0	0.0
Sample Size	297		297		

SOURCE: MDRC calculations from WEET Information System data and TOPS On-the-Job Training contracts.

NOTES: Each entry in column two was obtained by dividing the entry in column one by 297. Thus the unadjusted employment rates in this table may differ slightly from the adjusted employment rates in Table 5.2.

[a]Eighty-nine of 297 experimentals participated in TOPS On-the-Job Training. Two experimentals participated in On-the-Job Training under JTPA and are not included in these calculations.

[b]Quarter 1, the quarter of random assignment, may contain some income from the period prior to random assignment and is therefore excluded from cumulative outcomes.

TABLE 5.5

MAINE

IMPACTS OF THE TOPS PROGRAM ON DATES OF INITIAL EMPLOYMENT

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
First Employed During				
Quarters 1-11 [%]	83.1	81.1	2.0	0.593
Quarters 1-6 [%]	73.5	68.5	5.0	0.276
Quarters 7-11 [%]	9.6	12.6	-3.0	0.352
Date First Employed [%]				
Quarter of Random Assignment	16.4	24.7	-8.2**	0.033
Quarter 2	15.5	18.3	-2.7	0.478
Quarter 3	21.2	6.1	15.2***	0.000
Quarter 4	12.9	8.0	4.9	0.136
Quarter 5	4.3	8.3	-4.0*	0.086
Quarter 6	3.2	3.2	0.0	0.999
Quarter 7	1.6	5.6	-4.0**	0.020
Quarter 8	2.5	3.8	-1.4	0.434
Quarter 9	1.7	0.0	1.7	0.112
Quarter 10	2.3	1.5	0.7	0.613
Quarter 11	1.6	1.6	-0.1	0.966
Sample Size	297	147		

SOURCE AND NOTES: See Table 5.2.

As noted, the TOPS planners did not want the program to increase earnings only by increasing employment. They also wanted TOPS to enable the AFDC recipients in its target group to obtain better paying jobs than they would have without the program. How successful was TOPS in achieving this goal? No data are available on the wage rates of sample members, but it is possible to look at whether TOPS changed the distribution of earnings among experimentals relative to controls.

TOPS set a target of $4.00 per hour for the wage rate to be achieved by those who went through the program. For individuals working 40 hours a week in all 13 weeks of a quarter, the TOPS target translates into earnings of $2,080 per quarter. Table 5.6 shows the extent to which this target was reached. Impacts on the proportion who earned at least the target amount were positive and statistically significant over the full follow-up period and over the post-program period. During both those periods, the proportion above the target increased and both the proportion with zero earnings and the proportion with earnings short of the target fell. The impacts on the proportion with zero earnings mirror the employment rate impacts in Table 5.2. Thus, although TOPS had little cumulative effect on the proportion ever employed (see Table 5.2 earlier in the chapter), it did affect the distribution of earnings. This finding suggests that TOPS achieved most of its overall total earnings impact by increasing the total earnings of those employed rather than by increasing the proportion employed.

Comparing the employment and earnings outcomes of experimentals and controls who were employed provides further support for this explanation. Table 5.7 shows adjusted employment and earnings outcomes of sample members

TABLE 5.6

MAINE

IMPACTS OF THE TOPS PROGRAM ON THE DISTRIBUTION OF EARNINGS

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Distribution of Quarterly Earnings, Quarters 2-11 (%)[a]				
None	18.2	19.8	-1.6	0.680
$1-2079	72.7	78.3	-5.6	0.201
$2080 or More	9.1	1.9	7.2***	0.005
Total	100.0	100.0	0.0	
Distribution of Quarterly Earnings, Quarters 2-6 (%)[a]				
None	28.8	34.4	-5.6	0.237
$1-2079	67.4	63.9	3.5	0.471
$2080 or More	3.9	1.7	2.1	0.237
Total	100.0	100.0	0.0	
Distribution of Quarterly Earnings, Quarters 7-11 (%)				
None	31.3	34.7	-3.4	0.472
$1-2079	51.2	57.1	-5.9	0.250
$2080 or More	17.5	8.2	9.3***	0.008
Total	100.0	100.0	0.0	
Sample Size	297	147		

SOURCE AND NOTES: See Table 5.2.

TABLE 5.7

MAINE

EMPLOYMENT AND EARNINGS OUTCOMES AMONG EMPLOYED SAMPLE MEMBERS

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Average Number of Quarters With Employment, If Ever Employed				
Quarters 2-11[a]	5.72	5.26	0.46	0.180
Quarters 2-6[a]	3.03	3.06	-0.03	0.859
Quarters 7-11	3.66	3.41	0.25	0.194
Average Total Earnings [$], If Ever Employed				
Quarters 2-11[a]	8919.82	7090.95	1828.87**	0.041
Quarters 2-6[a]	3955.70	3625.03	330.67	0.438
Quarters 7-11	6463.14	5215.96	1247.18*	0.051
Average Earnings [$], If Ever Employed				
Quarter of Random Assignment	456.72	410.46	46.26	0.697
Quarter 2	732.70	829.45	-96.75	0.485
Quarter 3	1235.48	1140.42	95.06	0.568
Quarter 4	1299.94	1254.25	45.69	0.724
Quarter 5	1398.48	1243.28	155.20	0.260
Quarter 6	1529.37	1472.08	57.29	0.707
Quarter 7	1643.79	1390.82	252.98*	0.098
Quarter 8	1749.96	1546.90	203.06	0.193
Quarter 9	1784.41	1616.60	167.81	0.317
Quarter 10	1790.92	1657.39	133.53	0.449
Quarter 11	1833.33	1518.33	315.00*	0.060
Sample Size				
Quarters 2-11[a]	243	118		
Quarters 2-6[a]	211	97		
Quarters 7-11	203	97		
Quarter of Random Assignment	47	38		
Quarter 2	69	52		
Quarter 3	127	58		
Quarter 4	154	65		
Quarter 5	146	63		
Quarter 6	139	63		
Quarter 7	148	68		
Quarter 8	147	66		
Quarter 9	148	66		
Quarter 10	149	60		
Quarter 11	148	74		

SOURCE: MDRC calculations from State of Maine AFDC and Unemployment Insurance earnings records.

NOTES: Sample members were excluded from calculations for periods in which they had no earnings.

See also Table 5.2.

who were employed. The experimental-control differences in this table cannot be interpreted as earnings impact estimates, because employed experimentals had different characteristics from employed controls. However, the pattern of earnings differences between the two employed groups does show that earnings for employed experimentals were higher than for employed controls. The net earnings impact reached one peak in quarter 5 and another in quarter 10. (See Table 5.3.) Among the employed group the differences in the earnings of employed experimentals and employed controls followed a similar pattern. This does not necessarily imply higher wages, of course. The experimentals may have worked more hours per week or more weeks per quarter than controls.

The discussion so far indicates that the impact of TOPS on earnings comes in part from an increase in the proportion ever employed and in part from an increase in the number of quarters with employment for those who were ever employed. Ideally, it would be important to know whether TOPS also increased the duration of employment for experimentals in the months they worked, whether TOPS increased hours per week, and whether TOPS increased hourly wage rates. Unfortunately, this is not possible because no information is available on hours per week, weeks of work or wage rates. It is possible, however, to estimate how much of the total impact on earnings is due to (1) an increase in the proportion ever employed during the follow-up period, (2) an increase in the average number of quarters with employment for those ever employed during the follow-up period, and (3) higher average earnings per quarter with employment.

Table 5.8 shows the proportions due to each of the three possible causes. Note that the third source of earnings impacts is some combina-

TABLE 5.8

MAINE

DISAGGREGATION OF CUMULATIVE
EARNINGS IMPACTS

Follow-Up Period	Proportion of Impact Due to Difference in Cumulative Employment Rates [%]	Proportion of Impact Due to Difference in Number of Quarters With Employment [%]	Proportion of Impact Due to Difference in Average Earnings Per Employed Quarter [%]
Quarters 2-11[a]	7.1	18.6	74.4
Quarters 2-8[a]	34.2	-14.2	80.0
Quarters 7-11	11.5	18.5	70.0

SOURCE: MDRC calculations from State of Maine AFDC and Unemployment Insurance earnings records.

NOTES: The cumulative earnings impacts disaggregated here were presented in Table 5.3. The method for this disaggregation is explained in Appendix D.

Because of data limitations, the proportion of the cumulative earnings impact due to experimental-control differences in adjusted earnings per quarter with employment may not be attributed entirely to differences in hourly wage rates. Differences in hours of work per week and differences in number of weeks of work per quarter with employment are additional sources of the difference in adjusted earnings per quarter with employment.

See also Table 5.2.

tion of higher wages per hour, more hours of work per week and more weeks of work per quarter; it is not possible to differentiate among these given available data. Aside from rounding error, the proportions across each row of Table 5.8 add up to 100 percent, i.e., the total cumulative earnings impact. The second component in the second row is negative because the experimental-control difference in number of quarters with employment was negative over quarters 2 through 6. (See Table 5.7.)

Over the full follow-up period, 7.1 percent of the earnings impact was due to the increase in employment rates, and 18.6 percent was due to an increase in the number of quarters with employment among those ever employed. Three-quarters of the earnings impact, therefore, was due to more earnings in the quarters employed, i.e., a combination of higher wages per hour, more hours per week and more weeks of work per quarter employed. Increased earnings per quarter with employment was the most important source of the earnings gain in the in-program and post-program periods as well as in the follow-up period as a whole.

III. Impacts on Welfare

The intent of the TOPS sequence was to reduce receipt of welfare among the experimental group by increasing employment and earnings. This section examines whether the TOPS earnings impacts did indeed reduce welfare dependency. It should be remembered that the estimated impacts on welfare payments discussed here reflect only the AFDC dollars paid directly to the client -- not the part of the grant that was diverted to a subsidy pool for the OJT positions. Estimates of the effect of TOPS on overall welfare expenditures are addressed in Chapter VI.

A. AFDC Receipt

TOPS did not reduce welfare receipt over the full follow-up period, the in-program period or the post-program period. Table 5.9 shows the percentages of both experimentals and controls who ever received welfare and the average number of months of welfare receipt. Over the follow-up period as a whole almost all sample members (98 percent) received AFDC payments at some point. This is to be expected, given that being on AFDC was a requirement for eligibility. The percentages of experimentals and controls who ever received AFDC during the in-program period were the same as over the whole follow-up period -- again a reflection of the eligibility criteria. The percentage who ever received AFDC during the post-program period declined for both experimentals and controls. The percentage on welfare declined more for controls than for experimentals; however, this difference is not statistically significant. The quarter-by-quarter experimental-control differences tell essentially the same story. There was no statistically significant TOPS impact on welfare receipt in any quarter, and for the post-program quarters more experimentals than controls received welfare.

TOPS did not reduce AFDC payment amounts either. (See Table 5.10.) For the follow-up period as a whole experimentals received $6,768 in AFDC payments, on average, or 2.6 percent more than the control average of $6,599. Over the in-program period, experimentals averaged $3,871 in welfare payments, or 3.2 percent more than the control average of $3,750. For the post-program period, experimentals received $2,898, or 1.7 percent more than the control average of $2,848. In no quarter was the payment difference between the two groups more than $45, and in all but three

TABLE 5.9

MAINE

IMPACTS OF THE TOPS PROGRAM ON AFDC RECEIPT

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Ever Received AFDC [%]				
Quarters 2-11[a]	98.3	98.0	0.3	0.803
Quarters 2-6[a]	98.3	98.0	0.3	0.803
Quarters 7-11	73.3	71.6	1.8	0.693
Average Number of Months Receiving AFDC				
Quarters 2-11[a]	19.61	19.19	0.42	0.654
Quarters 2-6[a]	11.89	11.87	0.02	0.971
Quarters 7-11	7.72	7.32	0.40	0.489
Ever Received AFDC [%]				
Quarter of Random Assignment	98.6	99.4	-0.7	0.498
Quarter 2	97.6	98.0	-0.4	0.802
Quarter 3	89.9	89.8	0.0	0.994
Quarter 4	81.8	85.1	-3.3	0.390
Quarter 5	77.3	77.1	0.2	0.970
Quarter 6	73.8	71.4	2.4	0.592
Quarter 7	70.0	68.7	1.3	0.779
Quarter 8	64.4	63.1	1.3	0.789
Quarter 9	62.8	60.2	2.5	0.609
Quarter 10	58.9	52.5	6.4	0.204
Quarter 11	55.8	49.8	6.0	0.233
Sample Size	297	147		

SOURCE AND NOTES: See Table 5.2.

TABLE 5.10

MAINE

IMPACTS OF THE TOPS PROGRAM ON AFDC PAYMENTS

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Average Total AFDC Payments [$]				
Quarters 2-11[a]	6768.45	6598.52	169.93	0.660
Quarters 2-6[a]	3870.62	3750.36	120.26	0.476
Quarters 7-11	2897.84	2848.16	49.67	0.843
Average AFDC Payments [$]				
Quarter of Random Assignment	924.25	941.22	-16.97	0.428
Quarter 2	918.20	886.79	31.41	0.215
Quarter 3	834.50	798.73	35.77	0.330
Quarter 4	741.90	728.16	13.74	0.753
Quarter 5	694.64	686.92	7.72	0.872
Quarter 6	681.38	649.76	31.62	0.526
Quarter 7	636.64	636.23	0.41	0.994
Quarter 8	595.98	607.13	-11.15	0.837
Quarter 9	578.21	582.83	-4.62	0.932
Quarter 10	561.67	516.42	45.25	0.415
Quarter 11	525.34	505.55	19.79	0.727
Sample Size	297	147		

SOURCE AND NOTES: See Table 5.2.

quarters the experimentals' payments were slightly higher than those of controls. (See Figure 5.2.)

Figure 5.3 shows the trends in the proportions of experimentals in each of four groups over the follow-up period: those who had no earnings and received no AFDC payments; those who had some earnings and received no AFDC payments; those who had no earnings and received some AFDC payments; and those who had some earnings and received some AFDC payments. (These trends are shown for controls in Chapter IV, Figure 4.1.) The group who had no earnings and received some AFDC payments decreased sharply from random assignment through quarter 4, and declined slightly over the rest of the period. The group who combined earnings and AFDC receipt increased through quarter 4 and then declined for the rest of the period. The group who had some earnings and received no AFDC payments increased relatively steadily throughout the period.

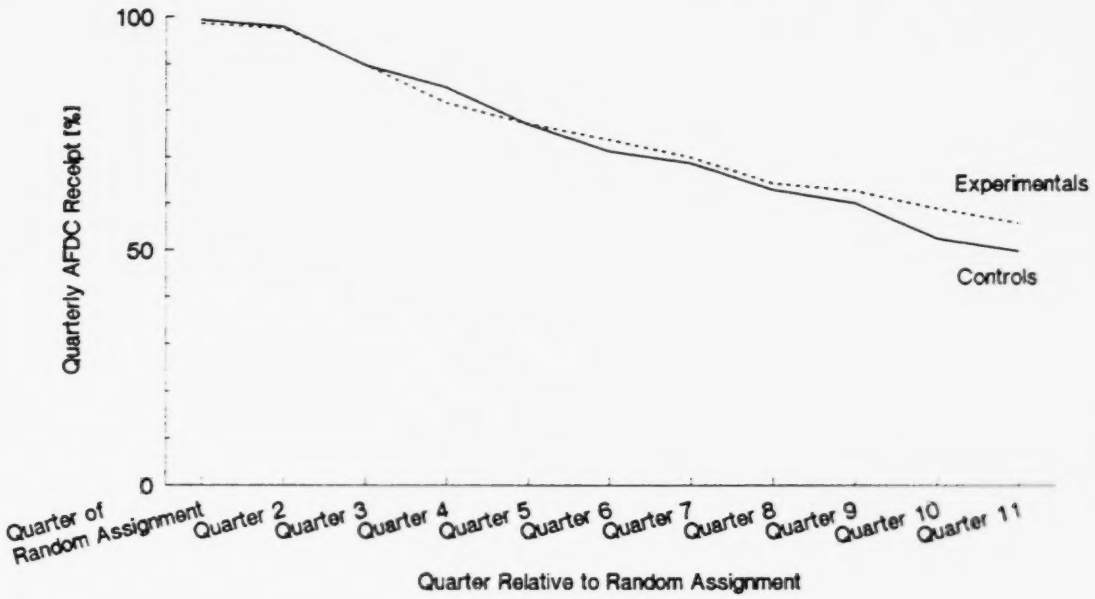
To what extent was TOPS responsible for these trends? Table 5.11 shows the impacts of TOPS on the distribution of experimentals among these four groups in quarter 6 (the last quarter of the in-program period) and quarter 11 (the last quarter of follow-up). For both experimentals and controls, the proportion who did not receive welfare grew, both among those who did not work and among those who did. The proportion who received welfare shrank, both among those who did not work and among those who did.

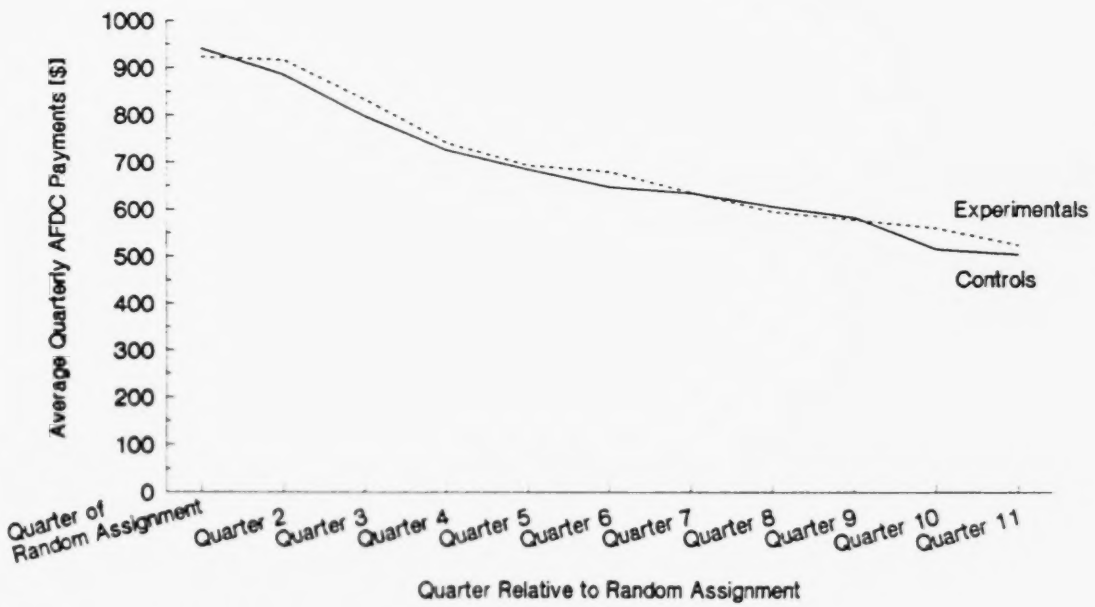
TOPS seems to have led to more mixing of earnings with AFDC income over the follow-up period as a whole. The impact on the proportion of people with both earnings and AFDC was 6.1 percentage points in quarter 6 and 3.8 percentage points in quarter 11. TOPS also seems to have led to more reliance on earnings and less reliance on AFDC income by the end of

FIGURE 5.2

MAINE

IMPACTS OF THE TOPS PROGRAM ON AFDC RECEIPT AND AFDC INCOME



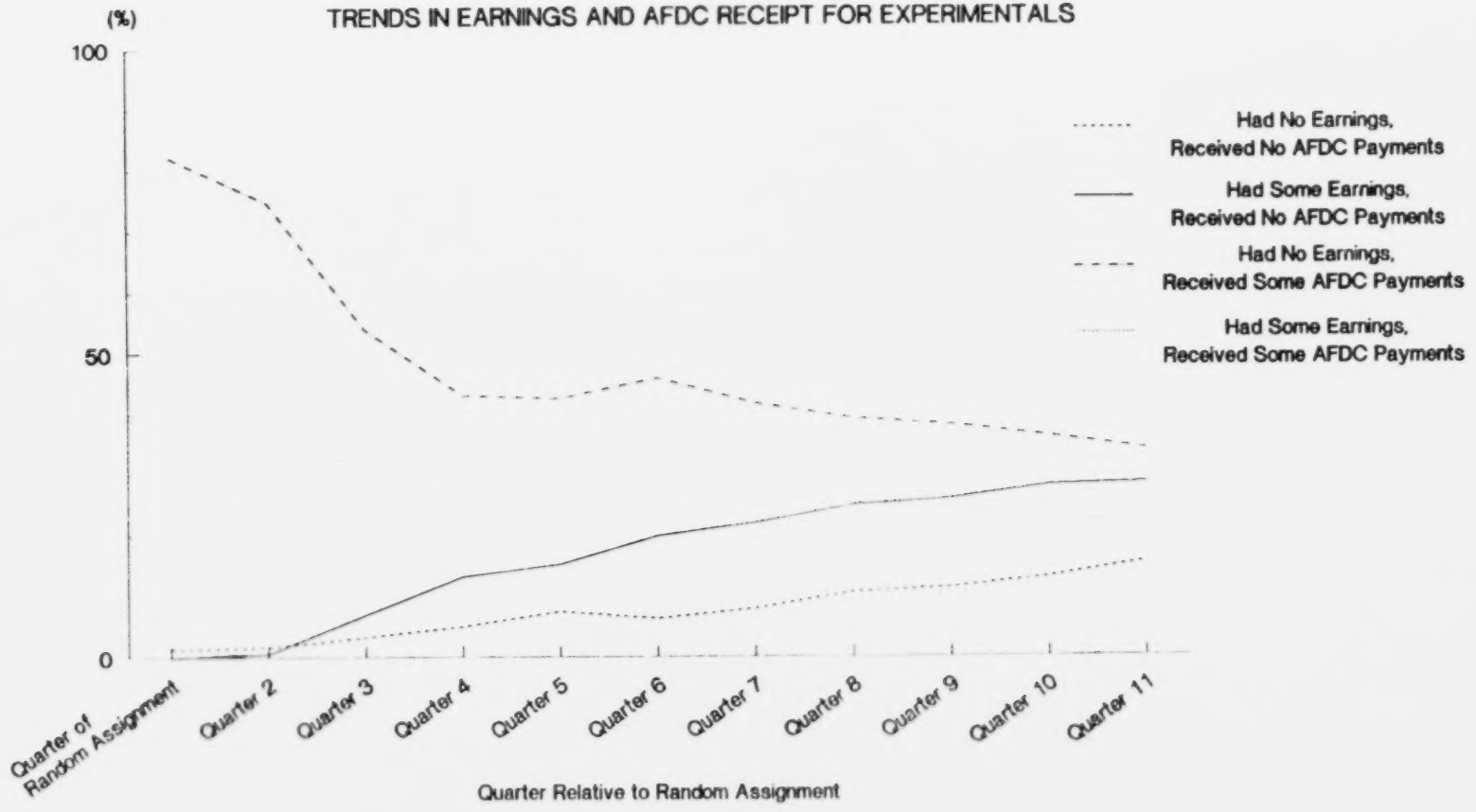


SOURCE AND NOTES: See Tables 5.9 and 5.10.

FIGURE 5.3

MAINE

TRENDS IN EARNINGS AND AFDC RECEIPT FOR EXPERIMENTALS



SOURCE AND NOTES: See Table C.2.

TABLE 5.11

MAINE

IMPACTS OF THE TOPS PROGRAM ON THE JOINT DISTRIBUTION
OF EARNINGS AND AFDC INCOME IN QUARTERS SIX AND ELEVEN

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Employment and Welfare Status, Quarter 6 [%]				
Had No Earnings, Received No AFDC Payments	6.3	9.8	-3.5	0.200
Had Some Earnings, Received No AFDC Payments	19.9	18.9	1.0	0.794
Had No Earnings, Received Some AFDC Payments	45.8	49.5	-3.7	0.471
Had Some Earnings, Received Some AFDC Payments	27.9	21.8	6.1	0.162
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 11 [%]				
Had No Earnings, Received No AFDC Payments	15.6	18.9	-3.3	0.393
Had Some Earnings, Received No AFDC Payments	28.6	31.3	-2.7	0.557
Had No Earnings, Received Some AFDC Payments	34.1	31.9	2.2	0.648
Had Some Earnings, Received Some AFDC Payments	21.8	17.9	3.8	0.357
Total	100.0	100.0	0.0	
Sample Size	297	147		

SOURCE AND NOTES: See Table 5.2.

the in-program period. The top panel of Table 5.11 shows positive impacts on the proportions in the two groups with earnings, and negative impacts on the proportions in the two groups with no earnings. This trend was less pronounced during the post-program period. In the bottom panel of the table, impacts on the proportions relying on just one source of measured income have changed signs; the impact on the proportion with earnings but no AFDC was minus 2.7 percentage points, and the impact on the proportion with AFDC but no earnings was plus 2.2 percentage points.

There is no clear explanation for the lack of welfare reductions, given the positive impacts on earnings. Scrutiny of the AFDC data showed that systematic administrative errors in grant calculation were not the answer. Examination of a sample of case records confirmed that grant levels were reduced when subsidized or unsubsidized earnings existed.

Several possible explanations seem plausible. First, the income disregard feature of the AFDC grant calculation in Maine over the demonstration period (discussed in Chapter IV) allowed earnings up to 27.5 percent of the full standard of need to be disregarded in the grant calculation. Any impact of TOPS on earnings in the range from 0 to 27.5 percent of need, therefore, would not result in grant reductions. Second, any program impact on earnings for persons whose earnings would have been above the AFDC income cutoff without the program would not have resulted in AFDC grant savings. Third, the pre-vocational training component of TOPS included discussions of how going to work would affect participants' AFDC grants and instruction in how participants could be their own advocates within the system. This could have led experimentals to be more effective than controls in making sure that their grants were not cut, reduced or

eliminated inappropriately.

Fourth, disaggregation of overall AFDC outcomes suggests that experimentals may have fallen into two groups with different patterns of effects on labor market and welfare outcomes. The adjusted average amount of AFDC income from quarters 2 through 11 was $6,768 for all experimentals. For the third of experimentals employed in OJT slots, however, adjusted average AFDC income was lower than the overall average by $1,480. For the two-thirds of experimentals not placed in OJT slots, adjusted average AFDC income was $654 higher than the overall average. The proportion of those not placed in an OJT position who were employed at any time was 74 percent, somewhat lower than the overall cumulative employment rate of 82 percent. Of course, these experimental-subgroup comparisons are not impact differences and are only suggestive that the lack of welfare savings may be associated with the group of experimentals who were not placed in OJT slots.[5]

IV. Impacts on Total Measured Income

This section presents the overall impact of TOPS on total measured income, which includes AFDC payments plus earnings as reflected in Unemployment Insurance (UI) earnings records. As discussed in Chapter II, it does not include other income, such as child support payments or income from jobs that are not covered by UI.

TOPS led to statistically significant increases in total measured income over the full follow-up period, the in-program period and the post-program period. (See Table 5.12.) Over the full follow-up period, TOPS increased measured income per experimental by $1,915, or 16 percent of

TABLE 5.12

MAINE

IMPACTS OF THE TOPS PROGRAM ON TOTAL MEASURED INCOME

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Average Total Measured Income [$]				
Quarters 2-11[a]	14112.46	12197.69	1914.76***	0.004
Quarters 2-6[a]	6726.01	6051.25	674.76**	0.023
Quarters 7-11	7386.45	6146.45	1240.00***	0.004
Average Total Measured Income [$]				
Quarter of Random Assignment	995.22	1049.97	-54.75*	0.090
Quarter 2	1090.85	1175.31	-84.46*	0.090
Quarter 3	1369.63	1234.91	134.71*	0.096
Quarter 4	1428.83	1256.70	172.13**	0.027
Quarter 5	1410.55	1162.29	248.26***	0.003
Quarter 6	1426.16	1222.04	204.12**	0.018
Quarter 7	1476.63	1237.46	239.17***	0.008
Quarter 8	1477.95	1269.68	208.27**	0.026
Quarter 9	1495.73	1251.42	244.31**	0.013
Quarter 10	1477.39	1158.05	319.34***	0.002
Quarter 11	1458.74	1229.83	228.91**	0.034
Sample Size	297	147		

SOURCE: MDRC calculations from State of Maine AFDC and Unemployment Insurance earnings records.

NOTES: Total measured income is defined as the sum of AFDC income and earnings.

See also Table 5.2.

the control group average of $12,198. Over the in-program period, the increase was $675, or 11 percent of the control group average of $6,051. Over the post-program period, the increase was $1,240, or 20 percent of the control group average of $6,146. The quarter-by-quarter pattern shows a statistically significant reduction in total measured income for experimentals compared to controls during the first two quarters, reflecting greater earnings by controls as experimentals went through the pre-OJT components of the TOPS sequence. Total measured income was higher for experimentals than controls in every other quarter, and the differences were statistically significant. The differences grew over quarters 3 through 5, fluctuated with no major trend over quarters 6 through 9, then reached a peak in quarter 10.

For both experimentals and controls, earnings became increasingly important in total measured income over the experimental period. The trends for the two groups are shown in Table 5.13 and Figure 5.4. Table 5.13 shows that the proportion of total measured income controls derived from AFDC fell steadily, from 92 percentage points in quarter 1 to 41 percentage points in quarter 11. Except at the beginning and at the end of the follow-up period, this proportion was lower for experimentals. TOPS increased the importance of earnings relative to AFDC income for experimentals versus controls over both cumulative periods although there were no reductions in absolute levels of welfare payments during this period. This indicates there was greater mixing of earnings and welfare payments among experimentals. For quarters 2 through 6, the AFDC proportion of income was 3.7 percentage points lower for experimentals; for quarters 7 through 11 it was 0.8 percentage points lower. TOPS also moved up the point where

TABLE 5.13

MAINE

IMPACTS OF THE TOPS PROGRAM ON SOURCES OF INCOME

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Fraction of Total Measured Income Derived from AFDC [%]				
Quarters 2-11[a]	58.6	61.7	-3.1	0.386
Quarters 2-6[a]	66.1	69.8	-3.7	0.264
Quarters 7-11	50.8	51.6	-0.8	0.851
Fraction of Total Measured Income Derived from AFDC [%]				
Quarter of Random Assignment	93.8	92.2	1.6	0.372
Quarter 2	89.0	83.8	5.3**	0.040
Quarter 3	71.8	72.9	-1.1	0.765
Quarter 4	61.5	66.3	-4.8	0.246
Quarter 5	58.3	64.1	-5.8	0.190
Quarter 6	59.1	59.8	-0.7	0.882
Quarter 7	54.8	57.1	-2.4	0.606
Quarter 8	50.6	52.0	-1.4	0.766
Quarter 9	49.0	51.1	-2.0	0.663
Quarter 10	46.5	45.4	1.1	0.815
Quarter 11	43.6	41.4	2.2	0.640
Sample Size	297	147		

SOURCE: MDRC calculations from State of Maine AFDC and Unemployment Insurance earnings records.

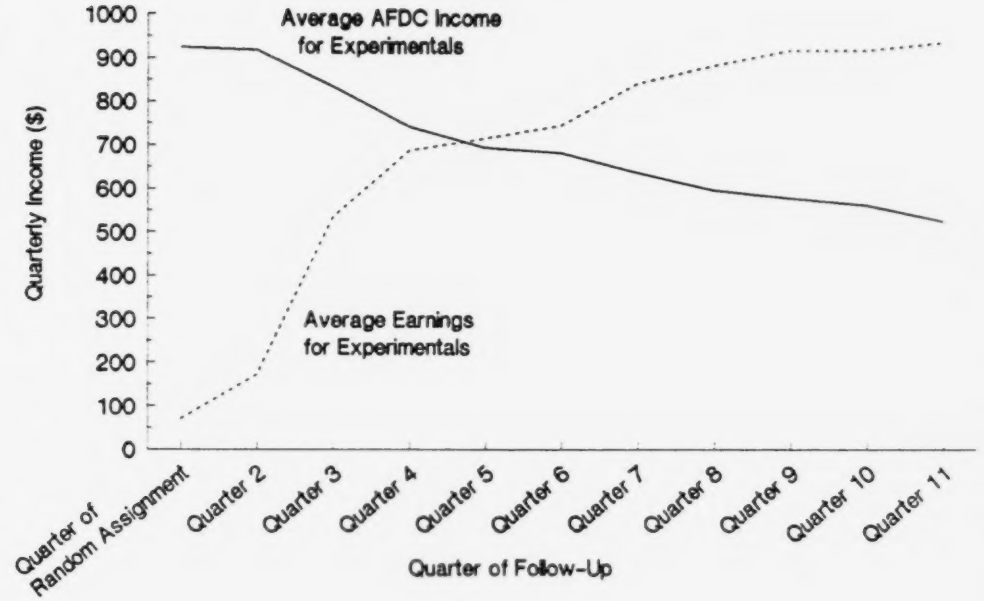
NOTES: Total measured income is defined as the sum of AFDC income and earnings. If total measured income is zero, the fraction of total measured income derived from AFDC is also zero.

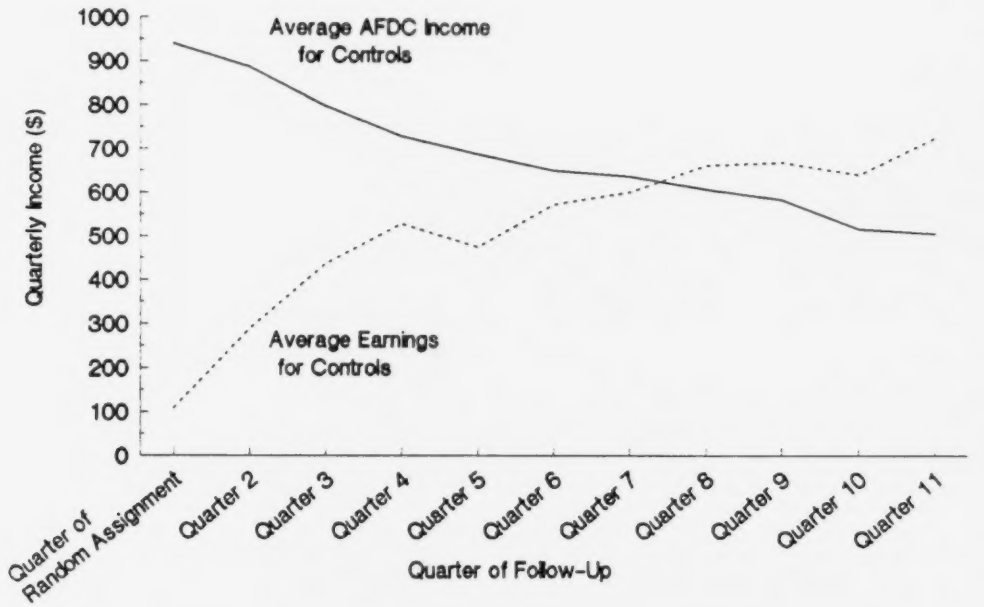
See also Table 5.2.

FIGURE 5.4

MAINE

AFCD INCOME COMPARED TO EARNINGS, BY RESEARCH GROUP





SOURCE AND NOTES: See Tables 5.2, 5.3, and 5.10

earnings overtook AFDC income as an income source from between quarters 7 and 8 for controls, to between quarters 4 and 5 for experimentals. The steep trend in earnings for experimentals between quarters 2 and 5 shows the effect of the change from unpaid pre-vocational training and work experience to paid OJT activity.

* * * * *

Clearly, TOPS was successful from the point of view of the AFDC recipients who were judged appropriate for the program. Whether it was a cost-effective program from the perspective of government budgets, or society as a whole, is the subject of Chapter VI.

CHAPTER VI

BENEFIT-COST ANALYSIS

This chapter presents a benefit-cost analysis of the TOPS program. The analysis draws on information presented in the last three chapters, as well as other data, in order to take account of the program's varied benefits and costs as comprehensively as possible. In addition, these benefits and costs are assessed from several major perspectives, including those of taxpayers, government budgets, welfare recipients, and society as a whole. Thus, conclusions can be drawn about not only the overall efficiency of the program, but also the gains and losses to the groups it most directly affects.

The analysis has many elements and, as a result, its description in this chapter resembles the completion of a jigsaw puzzle. The first section establishes the puzzle's boundaries and where the puzzle's pieces fit within them by describing the analytical framework used. The next two sections examine the pieces themselves, namely the individual benefit and cost components included in the analysis. Assembling the puzzle is the task of the fourth section, which aggregates the benefits and costs for each of the perspectives considered and then presents the overall results. There are unavoidably a number of missing pieces -- such as benefits and costs of TOPS that cannot be quantified and uncertainty surrounding the program's long-run effects -- but enough can be put together for an image of the program's relative effectiveness to emerge in the concluding section of this chapter.

I. Analytical Approach

This assessment of the benefits and costs of the TOPS program uses the same analytical approach followed in MDRC's previous evaluations of welfare employment programs,[1] although it introduces some additional distinctions due to the complexity of the TOPS program. The analysis places dollar values on both the program's effects and its use of resources. The effects and uses to be considered are shown in Table 6.1, which also indicates the major perspectives from which they are valued and the data sources used in making the estimates.

The measurable program effects include the impacts on earnings and welfare receipt discussed in the last chapter, as well as on several other outcomes: fringe benefits from regular and OJT employment, tax payments, AFDC grant diversion amounts, Food Stamps, Medicaid, transfer program administrative costs, and the value of labor services provided in TOPS work experience and OJT assignments. In addition, the earnings impact estimates are disaggregated by regular versus OJT jobs. These additional estimates (of effects other than the basic earnings and welfare impacts) will be made using procedures discussed below. As with the welfare and earnings impact estimates, they represent our best estimates of the net effects of the TOPS program -- that is, of the experimental-control differences in these outcomes.

The program resource use that is valued in the analysis includes all expenditures, regardless of funding source, on the operation and management of TOPS, support services and payments to program participants, and related program functions such as OJT grant diversion. The primary program funding

TABLE 8.1

MAINE

EXPECTED EFFECTS FOR COMPONENTS OF THE BENEFIT-COST ANALYSIS
BY ACCOUNTING PERSPECTIVE, WITH DATA SOURCES

Component of Analysis[a]	Accounting Perspective: Welfare Sample	Budget	Taxpayer	Society	Data Source
Increased Earnings and Fringe Benefits					
On-the-Job Training	+	-[a]	-	0	TOPS On-the-Job Training Contracts
Unsubsidized Employment	+	0	-	0	Unemployment Insurance Records
Output Produced by Participants					
Work Experience	0	0	+	+	Worksite Survey
On-the-Job Training	0	0	+	+	Worksite Survey
Unsubsidized Employment	0	0	+	+	Unemployment Insurance Records
Increased Tax Payments					
Payroll Taxes	-	+	+	0	Unemployment Insurance Records, Published Data
Income and Sales Tax	-	+	+	0	Unemployment Insurance Records, AFDC Records, Published Data
Reduced Use of Transfer Programs					
AFDC Payments	-	+	+	0	AFDC Records
Payments from Other Programs	-	+	+	0	AFDC Records, Unemployment Insurance Records, Published Data
AFDC Administrative Costs	0	+	+	+	AFDC Records, Published Data
Administrative Cost of Other Programs	0	+	+	+	Published Data
TOPS Operating Costs					
WEET	0	-	-	-	Program Tracking System, Staff Interviews, Central WEET Information
JTPA and Other Agencies	0	-	-	-	Program Tracking System, Staff Interviews, Central JTPA Information
Grant Diversion Administrative Costs	0	-	-	-	State Grant Diversion Records
TOPS Allowances and Support Services	+	-	-	0	Central WEET Records, Title XX Cost Information
Use of Other Employment and Training Programs					
WEET	-	+	+	+	Program Tracking System, Staff Interviews, WEET Cost Information
JTPA and Other Agencies	-	+	+	+	Program Tracking System, Staff Interviews, Cost Information for Other Programs
Net Supervision Costs	0	0	-	-	Assessed but not Estimated
Preference for Work over Welfare	+	0	+	+	Not Measured
Foregone Personal and Family Activities	-	0	0	-	Not Measured

NOTES: The components are shown as an expected benefit (+), cost (-), or neither a benefit nor a cost (0), according to a priori expectations regarding their value. The budget perspective includes both federal and state government.

[a] This reflects the cost of On-the-Job Training wage subsidies (including AFDC grant diversion) to government agencies.

source was WEET, which used both WIN and special demonstration program funds, but JTPA and other sources were also used. In addition, the use of non-TOPS education and training services by both experimentals and controls -- which, as indicated in Chapter IV, was substantial -- will be taken into account. Thus, the cost estimates ultimately produced by this analysis reflect the net use of WEET, JTPA, and other resources by members of the experimental group (that is, resource use by experimentals beyond what was used by the control group) in the same way that the benefit estimates reflect net program impacts.

Whether a given program effect or use of resources is a benefit or a cost depends on what is actually measured and the analytical perspective that is taken. The pluses and minuses shown in Table 6.1 each reflect the expected benefit or cost status of an item, but the actual results may be (and, as reported below, sometimes are) different from these expectations. Once measured, particular effects or expenditures will constitute benefits or costs, or not be relevant, depending on which of the analytical perspectives -- welfare recipients, taxpayers, budget and society -- is considered. The perspective of welfare recipients identifies benefits and costs for members of the experimental group, indicating how these individuals fared as a result of the program. The taxpayer perspective, on the other hand, identifies benefits and costs from the standpoint of everyone in society other than these welfare recipients. For example, if a reduction in AFDC use were found, that effect would translate into a loss for welfare recipients and a corresponding benefit for taxpayers.

The taxpayer and welfare recipient perspectives in Table 6.1 together constitute the social perspective. Thus, benefit and cost results for the

two groups are added together to obtain results for society. In the example of the AFDC reduction, the loss for one group is offset by a gain for the other so this transfer of money results in no net social gain or loss. It may also be noted that other points of view within the taxpayer group can be considered. One of these -- that of government budgets -- is shown in the table and is examined throughout the analysis. Another of these points of view is employers (not shown in the table, but considered at appropriate points in the analysis), who are obviously affected by programs like TOPS and hence have a stake in their performance.

The final benefit-cost estimates for TOPS will cover a five-year time horizon from the point individuals entered the research sample in 1983 or 1984. Data are available for only part of this time span -- the observation period -- which generally lasted about three to four years, but varied in length according to the type of data and the time someone entered the sample. (See Table 2.4 in Chapter II.) As a result, program effects beyond this time will be projected over the remainder of the five-year period using several assumptions. Program resource use generally occurred during the observation period, so cost projections are not necessary. All final estimates are discounted -- for both inflation and foregone investment -- to reflect 1985 dollars.

II. Program Effects

A. Earnings and Output

The TOPS program led to increased work by welfare recipients -- in regular employment as well as in the program's work experience and OJT placements -- and thus to increased output in the Maine economy. Both the

OJT and the regular jobs provided earnings and fringe benefits to welfare recipients which, as expected, proved to be their principal benefit from TOPS. For the regular employment, both the value of the additional output and the cost of the compensation accrued to employers, so they came out about even. For on-the-job training, employers could do better, because they paid only part of the OJT wages (the remainder was picked up by WEET and JTPA). Finally, because no wages or fringe benefits were provided in the work experience positions, the full value of that output went to the public and non-profit agencies that employed TOPS participants, and thus to taxpayers as well.

As discussed in the last chapter, TOPS experimentals showed a sustained increase in earnings over the level received by the control group. The value of the increase through the entire observation period was $1,839 per experimental. As shown in Table 6.2, an estimated $577 of this difference is attributable to OJT assignments (based on OJT enrollment and wage data[2]); the remaining $1,262 reflects regular employment.

Experimentals also enjoyed an increase in fringe benefits. For regular employment, the value of these benefits (excluding payroll taxes, which are treated separately below) was estimated at 12 percent of earnings, based on national employment compensation data.[3] For OJT jobs, estimates were obtained from the worksite survey of supervisors in the firms where OJT participants were assigned. On average, OJT fringe benefits amounted to 11 percent of earnings.

Under standard economic assumptions, the compensation paid in regular employment reflects the value of employees' output to employers and hence, barring external effects on others, to society in general. However, this

TABLE 6.2

MAINE

ESTIMATED EXPERIMENTAL-CONTROL DIFFERENCES IN EARNINGS, FRINGE BENEFITS, AND PERSONAL TAXES PER EXPERIMENTAL FOR THE OBSERVATION PERIOD[a]

Component of Analysis	Estimate
Earnings	
On-the-Job Training	$ 577
Unsubsidized Employment	1262
Total	1839
Fringe Benefits	
On-the-Job Training	63
Unsubsidized Employment	153
Total	216
Taxes	
Social Security Payroll Tax	130
Federal Income Tax	194
State Income Tax	67
State Sales and Excise Tax	35
Total	426
Sample Size	444

SOURCE: MDRC calculations from Unemployment Insurance earnings records and from published data on tax rates and employee benefits.

NOTES: Differences are regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Because of rounding, detail may not sum to totals.

[a]The end of the observation period was June 1987 for Unemployment Insurance earnings records.

does not apply to TOPS work experience and OJT assignments, because employers paid either no compensation or only partial compensation in these instances. The value of the output produced in these assignments is treated here, given assumptions that generally are more appropriate in such circumstances, as the full compensation employers would normally have to pay labor to provide the same output.[4]

An estimate of this cost was made using information collected in the worksite survey. The relative productivity of TOPS participants compared to employers' regular employees -- estimated by their job supervisors to be about as productive as the regular workers on average in both the work experience and OJT assignments -- was multiplied by the number of hours they worked to determine the time it would take regular workers to produce the same output. This was then multiplied by the appropriate hourly wage and fringe benefit rates for these jobs to arrive at the full-compensation estimates.[5]

The results indicate that the work experience positions provided not only job experience to TOPS participants, but also almost $700 worth of services per experimental to community agencies. The estimated value amounts to $1,314 per person who actually participated in one of these positions. In addition, the value of output produced in the OJT assignments was estimated as $652 per experimental (or $2,661 per OJT participant), which is about the same as the OJT wages and fringe benefits paid by employers and the program to participants.

B. Tax Payments

Since TOPS produced an increase in earnings, there is a corresponding increase in federal and state income taxes, payroll taxes, and state sales

and excise taxes. The appropriate tax rates and rules were applied to impute taxes from earnings and other income (using experimental-control differences in total earnings for computing payroll taxes, earnings over a base amount for calculating income taxes, and the combined income from earnings, AFDC payments, and unemployment compensation for determining sales and excise taxes).[6] The estimated increases in taxes paid by sample members during the observation period are shown in Table 6.2. Total taxes increased by $426 per experimental, with federal income taxes and social security payroll taxes accounting for most of this amount.

In addition, employers paid both social security and unemployment compensation payroll taxes on the increased earnings of the experimental group. The respective increases in these taxes were estimated as $130 and $26 per experimental.

C. Transfer Payments

As described in Chapter V, experimental group members on average received slightly increased AFDC payments over the course of the follow-up period. Receipt of Medicaid, Food Stamps and unemployment compensation were also affected by the TOPS program, so the effects on these transfer programs are included in the benefit-cost analysis as well.

For the purposes of this analysis, an experimental-control difference in regular AFDC payment receipt was calculated from AFDC records, as in the last chapter. However, the estimate of this difference shown in Table 6.3 covers the entire observation period, not just the eleven-quarter follow-up period common to all sample members that was used in the impact analysis (as much as 17 quarters of data were available on some sample members).

In addition, TOPS diverted some AFDC payments to finance part of

TABLE 6.3

MAINE

ESTIMATED EXPERIMENTAL-CONTROL DIFFERENCES IN TRANSFER PAYMENTS AND ADMINISTRATIVE COSTS PER EXPERIMENTAL FOR THE OBSERVATION PERIOD[a]

Type of Payment or Cost	Estimate
Transfer Payments	
AFDC	
Regular Payments	$ 386
Diverted Payments	192
Unemployment Compensation	-134
Medicaid	150
Food Stamps	-238
Total Transfer Payments	356
Administrative Costs	
AFDC	21
Unemployment Compensation	-12
Medicaid	9
Food Stamps	-33
Total Administrative Costs	-14
Sample Size	444

SOURCE: MDRC calculations from AFDC payments records, TOPS On-the-Job Training contracts, state grant diversion records, Unemployment Insurance earnings and payments records, published data on Medicaid costs and welfare administrative costs, and WEET Information System data.

NOTES: Differences are regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Because of rounding, detail may not sum to totals.

[a]The end of the observation period was November 1987 for AFDC records, December 1986 for Unemployment Insurance benefits records, and June 1987 for Unemployment Insurance earnings records.

the cost of the OJT wage subsidies. Because this grant diversion is an AFDC-funded transfer payment, an estimate of its value is presented in Table 6.3 (although grant diversion is treated as a program cost in the analysis, as discussed below). The average amount of AFDC diverted for OJT was estimated using wage information from the OJT contracts. The average amount of OJT earnings per experimental was multiplied by 26 percent which, according to MDRC calculations from program records, was the amount of the wage that grant diversion actually covered (i.e., 51 percent of the subsidy cost). As shown in the table, the resulting estimate of AFDC grant diversion per experimental is $192 (or $639 per person who actually participated in an OJT position).

Differences in unemployment compensation were measured using UI records data. The overall experimental-control difference reported in Table 6.3 indicates a modest reduction in payments to TOPS registrants during the observation period.

Program effects on the use of Food Stamps and Medicaid were estimated using several sources of information. Differences in Food Stamps have been imputed on the basis of total measured household income -- including earnings, AFDC, and unemployment compensation -- and the earnings disregard and child care and medical deductions used in determining program eligibility and benefits.[7] Differences in Medicaid were imputed on the basis of observed differences in AFDC receipt, rules governing Medicaid eligibility, and average Medicaid payments made to eligible individuals. An individual on AFDC, or participating in an OJT position funded by AFDC grant diversion, is automatically entitled to receive Medicaid, and remains eligible for a specified period of time after leaving the rolls.[8] Given

this, an experimental-control difference in the number of months of Medicaid eligibility was estimated and then multiplied by the average Medicaid monthly payment ($170 per AFDC case in Maine during 1985[9]) to determine the average TOPS effect on Medicaid payments.

As indicated in Table 6.3, the program generated an overall increase of $165 in the value of regular transfer payments received by the experimental group during the observation period. This net increase becomes $356 when the OJT wage subsidy funded by AFDC grant diversion is included. These results reflect increases in AFDC payments, grant diversions, and Medicaid payments. There were net reductions in unemployment compensation and Food Stamps, however, which partly offset the AFDC and Medicaid increases.

There was a slight decrease in estimated administrative costs for transfer programs during the observation period due to reduced use of unemployment compensation and Food Stamps. The TOPS effects on transfer program administrative expenditures were estimated based on differences in use of the transfers and state and federal program cost information.[10]

D. Future Effects

Thus far only program effects during the observation period -- which, as noted, lasted about three to four years -- have been considered. However, these effects almost certainly will last beyond this period, an expectation that should be taken into account in the analysis. Effects are consequently projected for each sample member beyond what was actually observed, so that the measured and projected effects together cover five years from the time an individual entered the sample. The average length of the projection period is generally one to two years, but it varies by

sample member. For example, if the observation period for an individual's earnings is as little as three years, the projection period is two years.

Projecting program effects entails selecting a base period estimate of experimental-control differences in the outcomes included in this analysis, and then making an assumption about future changes in that estimate. The base period used in this and other MDRC evaluations of welfare employment programs is the last two quarters of the observation period. It is assumed that differences observed during these two quarters do not decay over the course of the projection period, an assumption that is consistent with the patterns of program impacts measured for TOPS during the observation period. However, this assumption differs from most other MDRC evaluations where, because less follow-up information was available, a decay assumption based on other research has been used. Consequently, a sensitivity test in which the TOPS results are estimated using the same decay rate assumption used in most of the other MDRC studies of welfare employment programs (that is, an annual decay rate of 22 percent) is presented later in this chapter.

The resulting estimates are presented in Table 6.4. The values of all program effects -- both observed and projected -- have been adjusted for inflation and discounted at a 5 percent real annual rate to reflect 1985 dollars. As can be seen in the table, the projected portion of all the effects is smaller than the part that was actually observed. The sensitivity of these estimates to using alternative base, decay and discount rate assumptions will be tested later in this chapter.

TABLE 6.4

MAINE

ESTIMATED BENEFITS DURING THE OBSERVATION PERIOD,
PROJECTION PERIOD, AND AT FIVE YEARS AFTER RANDOM ASSIGNMENT,
PER EXPERIMENTAL

	Observation Period[a]		Projection Period		Five Year Total
Benefit Variable	Common Follow-up	Additional Follow-up	Projection Base[b]	Projected Amount	(Observed Plus Projected)
Earnings and Fringe Benefits					
On-the-Job Training	652	0	0	0	652
Unsubsidized Employment	1218	93	206	1531	2842
Payroll Taxes					
Employee Portion	118	6	13	96	220
Employer Portion	141	7	16	115	264
Other Taxes	215	60	40	257	533
AFDC Payments					
Regular	218	134	29	120	472
Diverted	195	0	0	0	195
Other Transfer Payments	-165	-44	-44	-353	-562
Transfer Program Administration	-12	-2	-4	-37	-50

SOURCE: MDRC calculations from worksite survey; Unemployment Insurance system earnings and payment records; AFDC payments records; published data on Medicaid costs, welfare administrative costs, tax rates, and employee fringe benefits; and the WEET Information system data.

NOTES: Results are expressed in 1985 dollars and therefore the observation period estimates differ slightly from those presented in Tables 6.2 and 6.3. Because of rounding, detail may not sum to totals.

[a] Based on available follow-up data.

[b] The projection base period is a quarterly average of the last two quarters of available follow-up for an individual. Program effects observed during this base period are multiplied by a projection factor to estimate benefits from the end of the observation period to five years from the point of random assignment. For the projection estimates it is assumed that impacts do not decay after the observation period.

III. Program Resource Use

A. TOPS Program Operations

TOPS was operated irregularly -- as a series of program cycles started from time to time in one of WEET's offices around the state -- rather than as an ongoing program. Each cycle entailed recruiting welfare recipients for the program from the area served by an office and then enrolling appropriate individuals in the sequence of TOPS activities described in earlier chapters. Thus, estimating the overall operating costs of the TOPS program requires estimating the costs of each cycle and then aggregating these estimates.

The operating cost of each program cycle was estimated in several steps. First, data were gathered from WEET and JTPA staff on the hours they spent on the cycles. JTPA staff worked on TOPS under financial and nonfinancial agreements with WEET. All staff time devoted to recruitment, assessment, pre-vocational training, work experience, OJT, and other program functions for the TOPS enrollees in these cycles was identified. Time spent on other WEET and JTPA activities or in working with other WEET or JTPA clients was excluded. The resulting estimates of staff hours were adjusted downward to eliminate activities associated with MDRC's evaluation research rather than program operations themselves, that is, one-third of recruitment and assessment time, since this served to create the control group, plus time spent on random assignment and cooperating with other evaluation needs.

Second, these staff hours were multiplied by per-hour salary rates, marked up for fringe benefits, nonpersonnel costs, and administrative overhead. The rates reflect annual WEET and JTPA salaries and other costs,

and annual staff hours data, in the appropriate offices during the time the cycles were operated. This yielded estimates of labor costs of operating each of the TOPS cycles.

Third, the costs of WEET contracts with other agencies (most commonly JTPA) for services delivered during the cycles were added, but only to the extent resource use was not already captured in the labor cost estimates just described. For example, in some instances JTPA was paid by WEET for staff time spent on TOPS and in other cases it was not. All JTPA time is counted in the analysis, but it is not counted twice if WEET paid JTPA for the time. It should be noted, finally, that the costs for TOPS cycles of allowances, support services, and OJT wage subsidies are considered separately below.

The costs of the cycles were then aggregated and central administrative costs (TOPS operating costs incurred at the state level) were added. These latter costs were estimated using state data and interviews with state staff. As with the estimates for the program cycles, the research costs associated with central administration have been excluded.

Table 6.5 presents the resulting estimates of the costs of operating TOPS in WEET's five regions in Maine. The estimates are broken down by region and program function. The total operating cost of the program, excluding research-related costs, was approximately $479,000. This amounts to $1,613 per experimental. Also provided in the table are estimates of the operating cost for each program component per experimental and, where applicable, per participant in a given component. Of note are the relatively high costs of recruiting and assessing individuals for TOPS ($267 per experimental) and of coordinating and managing the program

TABLE 6.5

MAINE

TOTAL TOPS OPERATING COSTS,
BY COMPONENT AND OFFICE

WEET Region	Recruitment/ Assessment	Pre-Vocational Training	Work Experience	OJT	Other	Total
I	$14,552	$15,640	$23,511	$3,804	$105,998	$163,303
II	22,738	6,823	6,258	3,398	34,077	73,296
III	31,441	14,594	13,867	21,815	24,190	105,707
IV	23,372	11,628	14,124	9,323	17,940	76,388
V	11,112	25,203	18,330	15,619	25,540	93,804
Central	9,348	8,692	8,710	4,851	18,608	46,210
Total	112,585	80,579	80,802	58,410	226,352	558,707
Research Costs	33,143	2,354	2,360	1,708	40,141	79,705
Net Cost	79,421	78,225	78,441	56,704	186,211	479,003
Cost per Experimental	$267	$263	$264	$191	$627	$1,613
Cost per Participant		$297	$390	$637		

SOURCE: MDRC calculations from WEET and JTPA expenditure records, information gathered in staff interviews, and WEET tracking system data.

NOTES: The end of the observation period was November 1985 for operating costs.

components to which these individuals were subsequently assigned (much of the $627 "other" cost).

B. TOPS Allowances, Support Services and Wage Subsidies

The second category of TOPS expenditures includes allowances and support service payments paid with WEET funds, as well as some additional child care services paid for by Title XX funds. Estimates of these expenditures are presented in Table 6.6.

Child care and transportation payments were made primarily to participants in pre-vocational training or work experience. However, WEET child care was sometimes provided during the first month of an OJT assignment, and Title XX child care could subsequently be used.

Other payments were made for supplies, uniforms and tools needed by TOPS participants for work experience positions or for regular jobs. In addition, during pre-vocational training and work experience, an allowance of $1.25 per hour was paid to cover miscellaneous personal expenses and to encourage continued participation. Such assistance was not generally provided to OJT participants, because it was expected that OJT wages and AFDC income disregards for such work expenses would be sufficient. However, support was provided in some instances.

Data on WEET support service and allowance payments to all experimentals were collected by TOPS staff for the period of October 1983 through March 1985. Title XX expenditures during the same period were estimated based on information from WEET and the Maine Bureau of Social Services Planning and Evaluation Unit.[11] These data were used to make the cost estimates provided in Table 6.6.

The total amount spent by WEET on support services and allowances for

TABLE 6.6

MAINE

TOTAL TOPS SUPPORT SERVICE COSTS, BY COMPONENT AND OFFICE

WEET Region	Allowances	WEET Child Care	Title XX Child Care	Transportation	Other	Total
I	$21,121	$18,381	$13,441	$7,961	$5,441	$66,345
II	9,129	6,596	3,428	3,908	8,152	31,213
III	8,654	5,553	5,307	1,786	541	21,841
IV	10,016	5,592	4,925	3,592	1,174	25,301
V	15,503	8,014	11,449	3,857	6,047	44,869
Total	$64,425	$44,136	$38,550	$21,105	$21,354	$189,570
Average Per Experimental	$217	$149	$130	$71	$72	$638
Average Per Person Receiving a Payment	$267	$244	$1313	$120	$181	—

SOURCE: MDRC calculations from WEET and Title XX expenditure records.

NOTES: The end of the observation period was March 1985 for support service costs.

TOPS participants was about $151,000. In addition, almost $39,000 of Title XX money was spent on child care for TOPS clients. On average, the total cost of allowances and support services per experimental was $638, which is considerably higher than in other welfare employment initiatives recently evaluated by MDRC. Child care accounted for almost half of this cost; allowances accounted for about 35 percent. Transportation and other payments were a small proportion of total allowances and support service costs. Because payments were linked to program participation, 96 percent of those who participated in TOPS received at least some assistance.

As indicated earlier, a wage subsidy of 50 percent of the total wage was paid to employers for on-the-job training positions. Seventy percent of the subsidy was paid by WEET -- about three-quarters of this through AFDC grant diversion -- and the remaining 30 percent was paid by JTPA. The amount of the wage subsidies was estimated from the OJT contracts, based on the starting wages paid, the scheduled hours per week, and the number of weeks worked. The estimated wage subsidy per person in one of the OJT assignments was $1,254, including $639 in grant diversion.

The total expenditures on the TOPS program -- both the operating expenses presented in the previous section and the allowances, support services, and subsidies discussed in this one -- are summarized in Table 6.7. The total aggregate expenditure on the program, excluding estimated research costs, was about $780,000. This amounts to $2,627 per experimental, or $2,933 per person who participated in any TOPS activity. WEET plus grant diversion paid for approximately 80 percent of this expenditure, with JTPA covering 15 percent and other funding sources covering the remaining 5 percent.

TABLE 6.7

MAINE

TOTAL TOPS COSTS, BY SOURCE OF FUNDING AND OFFICE

WEET Region	WEET Costs		JTPA Costs[a]	Title XX Child Care	Other Agency Costs	Wage Subsidies	Total
	Operating	Support Services					
I	$156,842	$52,904	$6,460	$13,441	0	$31,377	$261,025
II	60,374	27,785	12,392	3,428	$530	15,044	119,553
III	75,866	16,534	29,841	5,307	0	8,713	136,261
IV	65,128	20,377	11,259	4,925	0	13,961	115,651
V	74,816	33,420	17,238	11,449	1,751	42,473	181,147
Central	44,105	0	2,105	0	0	0	46,210
Total	477,131	151,020	79,295	38,550	2,281	111,568	859,845
Estimated Research Costs	79,053	0	651	0	0	0	79,705
Net Total	$398,078	$151,020	$78,644	$38,550	$2,281	$111,568	780,140

SOURCE: MDRC calculations from WEET, JTPA, and Title XX expenditure records; TOPS On-the-Job Training contracts; information gathered in staff interviews; and WEET tracking system data.

NOTES: The end of the observation period was November 1985 for operating costs, and March 1985 for support service costs.

[a]JTPA costs are those incurred in addition to TOPS expenses covered under contracts with WEET, and do not include wage subsidy payments.

C. Other Program Services

In addition to the TOPS sequence, members of the experimental group participated in regular WEET components, as well as self-initiated or program-referred education or training at JTPA, local schools, or community-based organizations. The control group also used these services. Indeed, as indicated in earlier chapters, controls in some instances received services similar to the ones offered in TOPS, although seldom more than one, never all three, and not in the same prescribed sequence.

The use of non-TOPS employment and training services by experimentals and controls was identified from automated WEET and JTPA records. For those services provided under JTPA funding, pertinent average cost information could easily be obtained from JTPA. However, determining the costs of the other employment and training services, as well as the use and cost of non-TOPS support services by the control group, required a match of a subsample of controls to individual case records, which was done by TOPS staff. This match identified all education, training, and other employment-related services, as well as all support services recorded in the case records; in most cases, the full costs of these services could be identified by WEET staff, but in some instances they had to be estimated.

As noted in Chapter IV, the unit costs of program services similar to the TOPS components were lower than for the TOPS components themselves. This at least partly reflects the fact that group services available to controls were generally delivered to larger groups than in TOPS. In addition, staff follow-up and monitoring was much less intensive for these activities than for TOPS.

The average operating cost per experimental for these non-TOPS

activities was $108, with an additional $26 for support services, allowances and wage subsidies. Participation rates in these activities were low for the experimental group. Overall, 38 percent of experimentals participated in some non-TOPS activity.

Over half of the control group participated in some employment or training activity. Also, some of the controls who did not participate actively in a program component still received staff attention and/or support services, which entailed resource use that is included in this analysis. The average operating cost of the services per control was $287, and the average cost of support services and subsidies was $230. The latter cost includes wage subsidies paid to controls in non-TOPS OJT assignments (AFDC grant diversion was not used in these assignments). The total cost of $517 per control represents a substantial use of program resources. This is an important finding in itself, for it indicates that this analysis compares TOPS to a substantial alternative treatment.

D. Total Costs for the Resources Used

Two measures of the total value of resources used by the research sample are of interest: One is the gross cost of all program services received by the experimental group. This is the sum of the TOPS-sequence operating costs, the TOPS support services and allowances costs, and the costs of all non-TOPS services experimentals received. The gross operating cost per experimental proved to be $1,721; the gross cost of support services and allowances was $654, and the cost of wage subsidies was $386. Thus, the total cost of all TOPS and non-TOPS services provided to experimentals was $2,761.

Net costs reflect the incremental use of resources by the experimental

group beyond that of controls. Thus, net costs have been calculated by subtracting the estimated costs of services per control from the gross costs per experimental that were just presented. The estimated net operating cost per experimental is $1,434, while the net costs of support services and subsidies are $521 and $289, respectively. The total net cost is thus $2,244.

These net cost estimates can be expressed in 1985 dollars -- as were the final estimates of benefits -- by adjusting for inflation and discounting to reflect that base year. The resulting operating cost estimate is $1,461 per experimental, with an additional $531 covering allowances and support services and $294 for wage subsidies, which yields a total net cost of $2,286. These estimates are the pertinent values for computing the overall benefit-cost results in the final section of this chapter.

IV. Results

The results for each type of program effect and resource use discussed in the previous sections are aggregated in Tables 6.8, 6.9, and 6.10. An individual result is entered as a benefit or cost for each perspective -- depending on whether it represents a gain or a loss to that group. The results are then added together to estimate the net value of TOPS from each point of view. As indicated earlier, all estimates for society as a whole constitute the sum of the results for the welfare recipient and taxpayer perspectives; the latter includes the standpoints of both government budgets and employers. All results cover a five-year time period and are expressed in 1985 dollars.

The first table presents the benefit-cost results from the perspective

TABLE 6.8

MAINE

FROM THE PERSPECTIVE OF THE WELFARE SAMPLE:
ESTIMATED GAINS AND LOSSES PER EXPERIMENTAL AFTER FIVE YEARS

Component of Analysis	Estimate
Gains	
Earnings and Fringe Benefits	
On-the-Job Training	$ 652
Unsubsidized Employment	2842
Allowances and Support Services	650
AFDC Payments	472
Losses	
Tax Payments	-753
Non-AFDC Transfer Payments	-562
Use of Other Employment and Training Programs	-119
Net Present Value[a]	3182

SOURCE: See Tables 6.4 and 6.7.

NOTES: Results are expressed in 1985 dollars. The full sample includes 297 experimentals and 147 controls. Because of rounding, detail may not sum to totals. Results include estimates of projected program effects beyond the observation period (See Table 6.4).

[a]The net present value is the sum of all gains and losses.

TABLE 6.9

MAINE

FROM THE GOVERNMENT BUDGET PERSPECTIVE
ESTIMATED GAINS AND LOSSES PER EXPERIMENTAL AFTER FIVE YEARS

Component of Analysis	Estimate
Gains	
Payroll Taxes	$ 484
Income and Sales Tax	533
Non-AFDC Transfer Payments	562
Transfer Administration	50
Use of Other Employment and Training Programs	302
Losses	
AFDC Payments	-472
On-the-Job Training Wage Subsidy	-294
WEET Operating Costs	-1366
Other Operating Costs	-276
Support Service Payments	-650
Net Present Value[a]	-1129

SOURCE: See Tables 6.4 and 6.7

NOTES: Results are expressed in 1985 dollars. The full sample includes 297 experimentals and 147 controls. Because of rounding, detail may not sum to totals. Results include estimates of projected program effects beyond the observation period (see Table 6.4).

[a]The net present value is the sum of all gains and losses.

TABLE 6.10

MAINE

ESTIMATED BENEFITS AND COSTS PER EXPERIMENTAL AFTER FIVE YEARS, BY RESEARCH GROUP AND ACCOUNTING PERSPECTIVE

Component of Analysis	Accounting Perspectives			
	Welfare Sample	Budget	Taxpayer	Society
Earnings				
On-the-Job Training	588	-294	-588	0
Unsubsidized Employment	2535	0	-2535	0
Fringe Benefits				
On-the-Job Training	64	0	-64	0
Unsubsidized Employment	307	0	-307	0
Output Produced by Participants				
Work Experience	0	0	680	680
On-the-Job Training	0	0	665	665
Unsubsidized Employment	0	0	3056	3056
Tax Payments				
Payroll Taxes	-220	484	220	0
Income and Sales Taxes	-533	533	533	0
Transfer Programs				
AFDC Payments	472	-472	-472	0
Payments from Other Programs	-562	562	562	0
AFDC Administrative Costs	0	-26	- 26	- 26
Administrative Costs of Other Programs	0	77	77	77
TOPS Operating Costs				
WEET	0	-1366	-1366	-1366
JTPA and Other Agencies	0	- 278	- 278	- 278
Grant Diversion Administration[a]	0	-	-	-
TOPS Allowances and Support Services	650	- 650	- 650	0
Use of Other Employment and Training Programs				
WEET	-119	254	254	136
Other	0[c]	47	47	47
Net Supervision Costs	0	0	-	-
Preference for Work Over Welfare[a]	+	0	+	+
Foregone Personal and Family Activities[a]	-	0	0	-
Net Present Value[b]	3182	-1129	-192	2990

SOURCES: MDRC calculations from Unemployment Insurance records; AFDC data; worksite survey; WEET Information System enrollment data; WEET and JTPA program cost records; TOPS On-the-Job Training contracts; and published data on welfare costs, tax rates, and employee fringe benefits. See text for descriptions of these sources.

NOTES: Positive amounts indicate a gain; negative amounts indicate a loss. All benefits and costs are estimated for a five-year time horizon beginning at application, and are expressed in 1985 dollars. Because of rounding, detail may not sum to totals. Results include estimates of projected program effects beyond the observation period (see Table 6.4).

[a]These are intangible effects not measured in this analysis.

[b]The net present value is the sum of all gains and losses.

[c]Estimated value less than $0.50 and greater than -$0.50.

of welfare recipients. It should be remembered that these results reflect net gains and losses to recipients. For example, the gain to recipients for OJT earnings reflects the difference in such earnings between experimentals and controls (the latter group was, in a few instances, assigned to non-TOPS OJT positions). Similarly, the net loss associated with non-TOPS training programs is due to the fact that controls received more allowances and support services from these programs than did experimentals. Hence, welfare recipients gave up this assistance by enrolling in TOPS.

As the table shows, the group of recipients targeted by TOPS benefited on average by $3,182 per experimental over the five-year period. This reflects their steady gains in earnings and fringe benefits -- from both OJT and regular jobs -- which were offset somewhat by taxes, but not by reductions in transfers. Indeed, estimated AFDC and Medicaid payments actually increased; Food Stamps and unemployment compensation fell.

Government budgets in contrast, showed a net loss from TOPS of $1,129 per experimental. The net cost of the program per experimental was about $2,300, easily the highest net cost among the welfare employment programs MDRC has evaluated since 1981. Moreover, this reflects the relatively intensive use of education and training services by the controls, which partially offset the gross TOPS cost -- including operating expenditures, allowances and support services and wage subsidies -- of more than $2,700 per experimental. The program generated a substantial increase in tax payments because of its large earnings impact, but no net savings in transfer payments.

Table 6.10 presents the final benefit-cost results from the four major

perspectives considered in this analysis. It thus presents overall findings for taxpayers and for society in general as well as the budget and welfare-recipient findings just described. The results indicate that taxpayers incurred a loss of about $200 per experimental. This is smaller than the purely budgetary loss reported above due to the estimated net value of the OJT assignments to private employers and the value of the work experience services to government and nonprofit agencies.

Given that the gains to welfare recipients and employers far exceeded the budgetary losses generated by TOPS, the net value of the program to society as a whole was substantial -- almost $3,000 per experimental. This result clearly indicates that TOPS was, in overall economic terms, an efficient program.

These results are quite robust compared to other analyses of this kind. This is indicated by an assessment of the sensitivity of the results to assumptions used in the analysis, which entailed three types of sensitivity tests. First, the net present value of TOPS was estimated for the four major perspectives using different assumptions in projecting program effects beyond the observation period. Twelve alternative assumptions were tried, four of which are shown in Table 6.11.[12] The table shows how net present values change when any one of the projection assumptions is altered in any of these four ways (keeping all other assumptions unchanged). Only one of the tests changes any of the qualitative conclusions of the analysis -- that is, changes values from positive to negative, or vice versa -- although other tests do alter the magnitude of some values substantially. Specifically, the net value of TOPS to taxpayers becomes positive if it is assumed that the base period

TABLE 6.11

MAINE

NET PRESENT VALUE ESTIMATES
GIVEN ALTERNATIVE ASSUMPTIONS,
BY ACCOUNTING PERSPECTIVE

Estimation Assumptions	Accounting Perspective			
	Welfare Sample	Budget	Taxpayer	Society
Benchmark Estimate[a]	$3182	-$1129	-$192	$2990
Projection Assumptions				
No Post-Observation Effects	2237	-1868	- 930	1307
Decay Rate = 22 Percent	3004	-1287	- 350	2654
Base = Weighted Average of Last 5 Quarters[b]	3184	-1163	- 226	2958
Base 50 Percent Higher[c]	3654	- 760	178	3832
Upper-Bound Assumptions[c]	3816	- 428	510	3395
Lower-Bound Assumptions[c]	1753	-2340	-1403	1280
Output Assumptions				
Value of Work Experience Output = zero	3182	-1129	-872	2310
Displacement in OJT and Regular Employment = 50 Percent	3182	-1505	-2052	1130

SOURCE: See Table 6.10.

NOTES: [a]Benchmark estimates are the net present value estimates in Table 6.10.

[b]Instead of using impacts for the last two quarters as the project base.

[c]See text for assumptions used in deriving these estimates.

estimates of earnings impacts (which are critical to the projected benefit estimates for taxes and Food Stamps) should be increased by 50 percent. This alternative assumption responds to the possibility of either measurement error or growth in impacts (rather than decay) during the projection period.

Second, combinations of projection assumptions were tested. The results for the combinations that yielded the highest and lowest net present value estimates from each perspective are presented in Table 6.11. In this case one qualitative conclusion changed -- the net present value of TOPS to taxpayers became positive -- when the most favorable combination of assumptions were used. It may be noted that while several changes in assumptions are involved in each combination, the critical factor is the projection of earnings. From the standpoint of welfare recipients, assuming zero future earnings impacts is key to the lower-bound estimate, and assuming a 50 percent higher base period earnings effect is key to the upper-bound estimate. The same is true for taxpayers because higher earnings generate additional taxes and reduced Food Stamps.

Finally, two different employment assumptions were tested. In one test it was assumed that the net value of output from work experience positions was zero. In the other it was assumed that half of all regular and OJT employment resulted in the displacement of other workers -- that is, the hiring of a TOPS participant meant not only that another person did not get the job, but also that he or she did not obtain other employment (and immediately replaced the TOPS participant on the welfare rolls). Neither change in assumptions altered the conclusions, although each change did affect the magnitudes of the net present value estimates. It is

especially worth noting the displacement assumption's importance to taxpayers, since by definition they include the displaced workers who would lose employment.

V. Conclusions

The TOPS program generated a substantial redistribution of income to the welfare population it sought to help. The average gain in net income -- taking into account earnings, taxes and transfers -- was over $3,000 per experimental. Given that the net budgetary cost of the program was about $1,100, TOPS can be viewed as a much more efficient means of transferring income to this group than simply raising their AFDC benefits.

On the other hand, TOPS was an expensive program that, despite its consistent impact on the earnings of welfare recipients, did not achieve any welfare savings. Thus, the conclusion reached about TOPS based on the results of this benefit-cost analysis ultimately rests on value judgments about the goals of programs like TOPS and the desirability of providing substantial help to the part of the welfare population targeted in this instance.

CHAPTER VII

POLICY IMPLICATIONS

This chapter seeks to integrate several themes raised in earlier chapters and returns to the policy issues raised in Chapter I. In particular, the discussion focuses on the significance of the TOPS demonstration within the larger framework of research on welfare employment programs conducted by MDRC and examines whether TOPS fulfilled the goals of its planners. Finally, the chapter considers some of the implementation and management lessons that have emerged from the evaluation, and the conditions under which it would make sense to replicate the TOPS program model.

I. Lessons on Comparing Program Effectiveness Across States

In addition to the TOPS program in Maine, MDRC has completed evaluations of welfare employment initiatives in six states since 1981. In contrast to the voluntary and relatively expensive TOPS program, the other state initiatives were mandatory and lower-cost. Thus, there is a tendency to compare the impact findings from TOPS with the findings from other states to judge the relative effectiveness of alternative welfare employment approaches. There are several important reasons, however, to be extremely cautious in making comparisons of this sort. These reasons underscore a more general lesson regarding the difficulty of comparing the effectiveness of different states' programs, given the diversity among states on such key dimensions as the welfare population served, AFDC

benefit structure and economic conditions.

First, is the matter of program scale. In other states, MDRC evaluated a large part of the WIN or WIN Demonstration system, analogous to the full WEET system in Maine. TOPS, however, was only one small demonstration program within that system. A total of 297 individuals were enrolled statewide in TOPS over 15 months. This compares with an AFDC caseload of 16,556 in January 1983, and a WEET caseload of 3,157 registrants shortly before the start of the demonstration. As discussed below, it seems doubtful whether the TOPS sequence could be run for a large proportion of the WIN population.

A second, related distinction concerns the segment of the AFDC caseload involved in the programs. In most of the other states, one of the goals was to impose a participation requirement on a large segment of the WIN-mandatory population, comprised primarily of women whose youngest child was at least age six. Although some of the programs focused on a specific portion of the WIN-mandatory population (e.g., applicants or newly-mandatory recipients), few if any individuals within the eligible population were screened out of the program for lack of interest or suitability. Those who failed to participate without good cause could be sanctioned. In contrast, all TOPS participants had to apply to the program and go through a screening process before being enrolled. Staff were disinclined to sanction individuals for non-compliance. In addition, as indicated in Chapter II, 61 percent of the TOPS enrollees were exempt from WIN participation, in most cases because they had young children. The TOPS research sample -- which has many of the characteristics of a displaced homemaker population -- is thus not likely to be comparable to the broader

range of individuals in the WIN-mandatory populaton.

A third cautionary note concerns the features of the Maine welfare system. For example, the welfare caseload is overwhelmingly white, reflecting the state's population as a whole. Other states evaulated by MDRC generally have had a much higher minority representation on their welfare rolls. In addition, as was discussed in Chapter IV, the method of calculating AFDC grants in Maine creates greater work incentives than exist in most other states. This, together with the fact that Maine's economy improved during the period of the study, affects the expected mix of work and welfare within the AFDC population.

Fourth, it must be stressed that in the mandatory programs evaluated by MDRC, the impacts on employment, earnings and welfare receipt, as well as the costs of the program, were averaged over a research sample of which approximately 50 percent did not participate in an activity. Non-participants were appropriately included in the research sample because their behavior could have been affected by the program's mandate even though they did not participate (e.g., through deterrence or sanctioning), and because it is not possible to isolate the segment of the control group who were comparable to the experimentals who did participate. In Maine, 90 percent of the experimental group received some TOPS services. This higher participation rate is presumably due in part to the fact that the program only served women who applied to participate and were screened for appropriateness. With non-participants comprising a smaller percentage of the research sample in Maine, the possible dilution of program impacts and costs caused by spreading them over non-participants as well as participants is not as great as in other states.

A final factor to be considered in interpreting the results from the TOPS evaluation is the level of services received by individuals in the control group. As in all evaluations using random assignment, the impacts in this report are presented as the net difference between outcomes for experimentals and controls, with the control group's outcomes potentially being affected by whatever services they may have received. Although members of the control groups in other states evaluated by MDRC were excluded from the special services being tested, they remained eligible for alternative employment-related services -- for example, JTPA training, community college courses and, in some cases, limited WIN services. In Maine, the controls remained eligible for the entire range of WEET services and were excluded only from the full prescribed TOPS sequence. Since the controls in Maine, like the experimentals, had demonstrated interest in receiving services and were screened to exclude those with serious barriers to employment, it is not surprising to see considerable activity in employment and employment-related services among this group.

For all these reasons, caution should be applied in generalizing from the findings of the TOPS evaluation, or comparing these findings to the results from other state programs. These qualifications should be kept in mind as the discussion now turns to some of the broader lessons that can properly be drawn from the Maine experience.

II. Lessons on Targeting

The targeting approach used in Maine illustrates a basic tension in welfare employment programs which seek to serve the harder-to-employ in components that are costly to operate and require lengthy periods of

participation. On the one hand, staff want to provide such programs to the harder-to-employ because these individuals seem to need more intensive assistance. On the other hand, there is a natural tendency to select candidates who seem most likely to succeed, out of concern that expensive treatments will be wasted on those who drop out early or cannot become employable within the allotted timespan. This tension is even more pronounced in OJT programs that rely heavily on employer satisfaction with agency referrals. In Maine, the tension resulted in a targeting strategy that reflected two somewhat contradictory objectives.

Maine intended to provide intensive services to women who qualified as harder-to-employ by virtue of having limited work experience and a history of welfare dependency. However, additional eligibility criteria specified that the women volunteer for services, be screened for barriers to participation such as child care, health and transportation problems, and be able to read at a level commensurate with the materials in the pre-vocational training. These criteria were introduced to ensure that enrollees would be likely to complete the lengthy and intensive sequence of activities, but they also moved the program away from the use of objective criteria as enrollment standards. This tendency was further strengthened when local office staff established their own informal selection criteria to screen women according to their educational levels, their ability to demonstrate motivation, and the match between their skills levels and job objectives. This development, which had not been foreseen by the planners of TOPS, grew out of staff concern that the women be able to meet employer expectations and not be set up for failure, and that the program show good placement rates into OJT positions.

The result was a research sample that, judged by such objective criteria as length of welfare receipt and prior work experience alone, would be labelled harder-to-employ. However, the women's educational status, demonstrated motivation and ability to arrange child care and transportation, all suggested that these women would be more likely to participate in employment and training activities and to find work than others who met the objective criteria but who did not come forward or were screened out. Indeed, the rates of cumulative participation in both employment-related activities and jobs shown by the control group in Maine were higher than for welfare recipients in both the experimental and the control samples in other states evaluated by MDRC.

The experience in Maine suggests what might happen if states choose -- as some recent legislative proposals on welfare reform would encourage them to do -- a targeting strategy that sets objective enrollment criteria regarding length of welfare receipt and prior employment but gives priority to volunteers. Such programs may enroll a group of relatively employable women among those with long spells of welfare receipt and without recent work experience. This is all the more likely if, as in Maine, program guidelines specify that enrollees must be motivated and free of barriers to participation; staff are given considerable discretion in selecting among applicants; and the program is subject to performance standards that emphasize high placement rates.

An open question that cannot be addressed in this study is whether the screening had any effect on the impacts of the TOPS program. Although the program did produce sustained impacts on earnings, it is not known whether the impacts would have been greater or smaller in the absence of such

screening. It is noteworthy in this regard that intensive employment programs targeted to harder-to-employ welfare recipients can have impacts as large as or larger than those found for TOPS, even in the absence of screening and even when experimentals show relatively low rates of employment and earnings.[1] This is because impacts measure the change that has occurred, compared to what would have happened in the absence of the program tested.

It should also be noted that the restrictive screening contributed to the high cost of operating TOPS and was a major reason why the program scale remained small. Thus, unless it can be demonstrated that screening increased the impacts of TOPS, the targeting strategy employed in Maine ultimately raises questions about the efficient use of scarce resources.

III. Lessons on Meeting Program Goals

A. Enrollment Goals

The TOPS program fell well below its enrollment goals, due in part to the difficulties encountered in the outreach process and to the screening policies implemented at the local office level. While some of these factors were unique to the implementation conditions in Maine, the failure to reach the enrollment targets is consistent with the pattern found in the other grant diversion OJT programs recently studied by MDRC.[2] These programs, too, fell short of their enrollment goals. These examples suggest that the scale of a grant diversion funded OJT program is likely to remain small. This kind of program should thus be seen as an employment strategy for a small proportion of the AFDC caseload, rather than as a strategy that could realistically be used for a broad segment of the AFDC

caseload.

B. Employment and Earnings Goals

The planners of TOPS identified a number of goals regarding the outcomes of the program on employment and earnings. They intended that the TOPS sequence would both increase employment levels and move AFDC recipients into "better" jobs -- jobs that would pay higher wages, provide more hours of work and more stability than those which program eligibles would have obtained in the absence of TOPS.

As discussed in Chapter V, the TOPS sequence had a positive impact on both employment and earnings. A higher proportion of experimentals than controls was employed during each quarter of the follow-up period, beginning with quarter 3. It should be noted that the first two quarters of follow-up show negative impacts on employment, because participants were active in the pre-vocational training and work experience components. This pattern is typical in interventions that require lengthy participation and do not focus on immediate placement: early impacts are expected to be negative, as people are in program activities rather than in employment.

There is some evidence that TOPS may also have helped people to move into better jobs. For example, as indicated in Chapter V, most of the earnings gains of $1,745 over quarters 2 through 11 (a 31 percent increase) were attributed to the fact that those with jobs were earning more while employed, rather than the fact that experimentals merely had higher rates of employment. For those employed, the higher earnings resulted from some combination of higher wages, more hours of work per week or more weeks of employment. The separate contribution of each of these factors cannot be identified, however. TOPS may also have resulted in increased employment

stability, indicated by the 11 percent increase in the number of quarters in which experimentals worked compared with controls (4.7 versus 4.2). This increase was not statistically significant, however.

C. Goals Concerning Welfare Receipt

An assumption underlying TOPS was that higher earnings would result in reductions in welfare receipt and the proportion of individuals receiving welfare. However, neither of these goals was achieved. On average, there was no net reduction in welfare receipt, and there may have been a small net increase. There is no fully satisfactory explanation for this phenomenon. Plausible explanations, discussed more fully in Chapter V, include the effect of the income disregard features that are inherent in Maine's method of calculating welfare grants; the fact that some of the earnings gains could have been for experimentals who would have left the welfare rolls anyway; and the effect on experimentals of being taught how to maximize their AFDC eligibility and to be their own advocates.

IV. Lessons on Using OJT as a Transitional Employment Strategy

TOPS sought OJT positions that would pay, on average, $4.00 per hour, be full-time in the private sector, include non-traditional placements and offer opportunities for training and stable employment. The characteristics of the OJT jobs, as discussed in Chapter III, indicate that the TOPS OJT positions met some but not all of these criteria.

On average, the starting wage in the OJT positions slightly exceeded the goal of $4.00 per hour, although two-thirds of the jobs paid $4.00 or less per hour. Just over a quarter were public sector or non-profit placements, reflecting both rollover from work experience assignments and

the attractiveness of public sector jobs, which frequently offered better wages and fringe benefits than private employers. Only a small proportion were in non-traditional jobs. Typically, the OJT positions appeared to offer little opportunity for training beyond that associated with showing any new employee the ropes.

An unusual aspect of the TOPS design was the decision to place enrollees in pre-employment activities prior to placement in an OJT position. Staff believed this would increase the program's success rate by raising participants' confidence and skill levels, thus making participants more attractive to employers and increasing the likelihood that they would complete the OJT assignment and continue as unsubsidized workers. The first components could also increase participants' employability by serving as a screening process for employers, providing more of a guarantee that the participants had demonstrated basic employability skills. Indeed, staff felt that in practice this up-front job preparation was important and did contribute to the high rollover rates in the OJT component.

The evaluation, however, cannot determine the relative contribution of the pre-employment components to the impact results, and therefore cannot answer whether the additional cost was warranted. MDRC's soon to-be-completed evaluation of a grant diversion OJT program in New Jersey, where the primary difference between the experimental and control treatments is eligibility for OJT, may provide a better measure of the separate effect of an OJT program.

Other policy issues concern the role of the OJT subsidy in TOPS. A number of hypotheses have been advanced to explain the practice of subsidizing wages paid by employers in OJT. One argues that employers are

being compensated for higher training costs and lowered productivity while the new employee is learning the skills needed to perform the job. Another argues that the subsidy functions as a "risk premium" providing an incentive for employers to hire individuals who may appear less likely to succeed on the job. However, if neither of these justifications applies and the participant would have been hired even without a subsidy, then the subsidy might be more of a windfall than a hiring incentive.

The TOPS findings shed some light on this debate. A combination of factors -- especially that the OJT positions seemed to offer little training beyond that given to any new employee, and that employers found the OJT employees to be as productive or almost as productive as other new employees -- suggest that in TOPS the OJT subsidy was not compensation for training costs or reduced productivity. It does not follow, however, that even if employers benefit financially, an OJT position is inappropriate. The added cost of such a program might be worthwhile if it accelerates the speed with which AFDC recipients are placed in jobs, or leads to better jobs.

V. Lessons on Grant Diversion

Another element of TOPS was the use of AFDC grant diversion to pay part of the cost of the employer subsidy in the OJT phase of the sequence. It is worth stressing again that grant diversion refers only to the funding mechanism; it is not the program intervention being evaluated.

In general, the grant diversion process functioned smoothly, but a few cautions emerge from Maine's experience. First, it is important to have seed money available to cover the period before the diversion becomes

effective and any short-falls in the monthly cash flow. It is possible that the diverted amounts will not pay for as high a proportion of the subsidy as projected. Second, the grant diversion pool must be carefully monitored on a monthly basis. Third, the timing of the transfer of funds from the AFDC account into the wage pool is critical: the start of the grant diversion period should be delayed to correspond with the period that an individual's grant will first reflect the OJT earnings. Fourth, if it is necessary to supplement or combine an automated tracking system with a manual one, it is doubtful that the wage pool could be operated on a very large scale.

One rationale for AFDC grant diversion is that welfare savings foregone in the short run and invested in programs will yield larger welfare savings in the long run. TOPS, however, did not produce welfare savings during the follow-up period and, from the budget perspective, did not pay for itself. This raises some questions regarding the returns on the grant diversion investment. However, because the component funded with grant diversion was only one piece of a multi-part sequence in TOPS, the separate effect of the grant diversion strategy on long-term AFDC expenditures cannot be isolated. It should also be kept in mind that from the social perspective, the benefits of TOPS exceeded the costs.

VI. Other Management Lessons

TOPS posed an implementation challenge because of the complexity of the multi-component design, the necessity for interagency coordination in service delivery, and the length of time that participants were expected to be active in the program. The demonstration experience suggests a number

of general policy lessons of relevance to other states.

A. Lessons on Interagency Coordination

The TOPS program illustrates some of the difficulties inherent in efforts to coordinate the provision of training and placement services for AFDC recipients between the WIN or WIN Demonstration system and the JTPA system. Despite a mutual commitment to serving AFDC recipients in TOPS, the two staffs in Maine displayed quite different philosophies about whether and how to work with harder-to-employ clients. They applied different criteria to assess whether individuals were appropriate for services and whether they were job ready; JTPA staff were particularly skeptical about the advisability of determining in advance who would be a good candidate for OJT several months later. The two staffs also had different attitudes about what it was appropriate for staff to do for clients and what clients should be expected to do for themselves. In general, JTPA expected program enrollees to be more self-reliant and less dependent on support services and staff counseling and intervention.

These differences reflected the very divergent standards by which performance was measured in WEET and JTPA, the particular resource constraints on the two systems and the relationship each had with the employer community. JTPA staff were more accountable for -- and thus, more concerned about -- high placement rates, quick turnover, and low-cost initiatives. Seeing themselves as responsible to the employer community as well as to the disadvantaged, they were also more concerned than WEET about employer satisfaction.

Additional tensions arose from the poor communication channels that were in place at the start of the demonstration, difficulties compounded by

the fact that participants moved back and forth between agencies during successive components of the TOPS sequence. Communication problems were further exacerbated by the fact that the political relationship between the two systems was changing in Maine, and each was attempting to carve out a new role in providing employment and training services to disadvantaged groups.

The philosophical differences between WEET and JTPA staff had two primary effects on the implementation of the demonstration. First, they led to the development of more stringent screening criteria than had been intended in the design. Second, they led to some confusion among participants about the services to be provided, staff expectations and their own responsibilities.

As discussed more fully in the interim report, Maine's experience suggests that the following items are important to the smooth implementation of a program that relies heavily on interagency coordination and case management for service delivery in a multi-component sequence of activites: the involvement of representatives of local as well as central staff from both agencies in the early planning stages; the designation of a liaison in each local office who commands the respect of staff in both agencies; joint staff training at periodic intervals, beginning before the start of the program; regular opportunities for case-management reviews with staff from both agencies; and the need for continued attention from top level staff in both agencies.

B. Lessons on the Fit between Management Style and Program Design

The implementation of TOPS also provides some general lessons about what is likely to occur when a fairly prescriptive program model is

superimposed on a system in which the management structures encourage discretionary decisionmaking by staff.

The WEET system was premised on the idea of discretionary decisionmaking both at the regional office level and at the case-manager level within each regional office. This was a conscious decision by central planners who wanted to avoid the over-regulation they associated with the WIN system that WEET replaced. To encourage regional diversity, staff in the Division of Welfare Employment developed flexible guidelines for the use of resources, program mix, service priorities and performance goals. At the WEET staff level, the concept of case management and service brokering required staff to tailor clients' employability development plans to their individual needs and to use resources in a flexible manner.

The TOPS program model, in contrast, was quite prescriptive in a number of important ways. As conceived by planners in the Division of Welfare Employment, the intake process would have precluded much decisionmaking by staff, relying instead on the application of objective criteria to determine eligibility. The TOPS model, as designed, was also prescriptive in that it specified a sequence of activities through which participants would move and did not provide for alternative service options once people had begun the sequence. Because this approach contrasted noticeably with service provision and case-management responsibilites in the rest of WEET, the restrictions were difficult for both clients and staff to accept and accounted for much of the staff's dislike for the demonstration.

The different philosophies also resulted in some adjustments to the design in practice. As previously discussed, WEET staff -- influenced largely by JTPA staff -- tended to do more screening than planned prior to

random assignment and before transitioning participants into subsequent components. They also added job search activities not called for in the program model. Finally, a subset of the experimental group enrolled in education and training activities that were not part of the TOPS design.

The point is not that prescriptive models should be avoided, but that it will be difficult to operate such designs within a management structure that pushes for greater freedom in decisionmaking. In these cases, it is likely that staff will find ways to adapt the model to conform more closely with traditional management practices, particularly if the new program is only a small piece of the overall system.

VII. Lessons on Replicating TOPS

Whether states should seek to replicate the TOPS program model is essentially a value judgment that cannot be answered on the strength of the research findings alone. TOPS was clearly effective, compared to the alternative services used by the control group, in raising the income levels of the welfare recipients who volunteered to be in the program. However, from the budget standpoint, the approach was not cost-effective: the costs of operating the program were not offset by the additional taxes paid and any budgetary savings.

If a state is primarily concerned about raising the incomes of AFDC recipients -- in this case, those who are working -- and less concerned about achieving reductions in AFDC benefit costs, TOPS could be an appealing program to operate. Indeed, it appears to represent a rather efficient method of transferring income: a net budgetary cost of $1,129 per experimental resulted in a net income gain of $3,182 per experimental after five

years.

The scale of the program is also an important consideration. Because a program like TOPS will probably remain small, it is not likely to be a major component of a welfare employment strategy. It could, however, be a promising piece of such a strategy if implemented as one alternative among an array of services.

APPENDIX A

TABLE A.1

MAINE

SELECTED CHARACTERISTICS OF AFDC SAMPLE MEMBERS AT THE TIME OF RESEARCH START, BY DEMONSTRATION STATE

Characteristic	Maine	Arkansas	San Diego, California	Cook County, Illinois	Baltimore, Maryland	Virginia	West Virginia
Study Area	State-Wide	Eight Counties	County-Wide	County-Wide	10 of 18 Centers	11 Cities/ Counties	21 Counties
Welfare Status (%)							
Applicant	0.0	59.5	100.0	0.0[d]	49.8	40.4	0.0
Recipient	100.0	40.5	0.0	100.0	50.2	59.6	100.0
WIN Status (%)							
Mandatory	38.6	100.0	100.0	100.0	100.0	100.0	100.0
Voluntary	61.4	0.0	0.0	0.0	0.0	0.0	0.0
Age (%)							
24 Years or Less	22.7	26.8	9.1	25.7	14.0	8.6	4.9
25 to 34 Years	49.4	50.8	46.6	45.6	52.8	49.0	46.8
35 to 44 Years	22.8	15.9	33.7	20.5	24.7	31.4	36.1
45 Years or More	5.0	6.5	10.6	8.3	8.4	10.9	11.9
Average Age (Years)	30.1	29.4	33.6	N/A	31.9	33.6	34.6
Sex (%)							
Male	0.0	2.4	15.6	12.3	10.1	0.0	0.0
Female	100.0	97.6	84.4	87.7	89.9	100.0	100.0
Ethnicity (%)							
White, Non-Hispanic	97.9	13.4	56.9	15.7	29.5	32.8	89.9
Black, Non-Hispanic	1.2	86.3	20.5	72.1	69.2	64.0	9.8
Hispanic	0.5		18.2	11.1	0.3	1.2	
Other	0.5	0.1[e]	4.5	1.1	1.0	2.0	0.3[e]
Degree Received (%)							
None	25.0	50.4	39.1	N/A	58.4	56.3	54.0
General Equivalency Diploma	24.8		7.5	N/A	6.8	8.1	13.2
High School Diploma	50.2	49.6[f]	53.4	N/A	36.9	35.5	32.8
Average Highest Grade Completed	11.3	11.0	11.3	N/A	10.5	10.5	10.2
Marital Status (%)							
Never Married	25.5	48.9	16.0	N/A	40.5	31.1	13.3
Married, Living With Spouse	0.5	2.7	12.9	N/A	8.8	7.1	16.8
Married, Not Living With Spouse	13.6	25.1	34.1	N/A	33.5	35.7	22.8
Divorced or Widowed	60.4	23.3	37.0	N/A	17.2	26.1	47.0
Average Number of Children Under 18 Years	1.81	N/A	1.74	N/A	1.80	N/A	2.00
Any Children (%)[g]							
Less Than 6 Years	49.3	53.7	18.4	N/A	16.8	N/A	10.8
Between 6 and 18 Years	68.0	68.7	87.5	N/A	86.5	N/A	94.6

(continued)

TABLE A.1 (continued)

Characteristic	Maine	Arkansas	San Diego, California	Cook County, Illinois	Baltimore, Maryland	Virginia	West Virginia
Prior AFDC Dependency (%)							
Never on AFDC	0.0	36.9	33.7	N/A	13.9	12.1	13.9
Two Years or Less	36.9	32.7	38.9	N/A	31.5	28.1	31.9
More Than Two Years	63.1	30.5	27.4	N/A	54.7	59.8	54.2
Average Months on AFDC During Two Years Prior to Research Start	19.4	11.0	6.1	N/A	13.7	14.3	14.0
Held a Job at Any Time During Four Quarters Prior to Research Start (%)[b]	34.7	22.5	51.5	31.1	44.3	36.7	17.9
Held a Job at Any Time During Quarter Prior to Research Start (%)[b]	16.2	14.1	33.1	16.5	28.2	25.6	9.6
Average Months Employed During Two Years Prior to Research Start	3.2	5.2	10.1	N/A	5.5	N/A	2.8
For Longest Job Held in Past Two Years[c]							
Average Hourly Wage Rate ($)	3.64	3.78	5.13	N/A	4.78	3.87	3.74
Average Weekly Hours	30.4	33.5	36.8	N/A	33.1	29.9	33.7
Duration of Job (Months)	13.0	19.3	22.0	N/A	28.7	17.9	17.5
Sample Size	444	1153	3581	11812	2823	3184	3694
Sample Enrollment Period	10/83-12/84	6/83-3/84	10/82-8/83	2/85-9/85	11/82-12/83	8/83-9/84	7/83-4/84

SOURCE: Calculations from MDRC Client Information Sheets as reported in MDRC Final Reports for Arkansas; San Diego, California; Illinois; Maryland; Virginia; and West Virginia; Table 2.3 of this report.

NOTES: The samples include both Experimentals and Controls. The table includes only AFDC clients; however, some state demonstration programs include both AFDC and AFDC-U clients.

N/A indicates data not available.

Distributions may not add exactly to 100.0 percent because of rounding.

No tests of statistical significance were calculated.

[a] Distributions may not add to 100.00 percent because individuals can have children in more than one category.

[b] Calculated from Unemployment Insurance earnings records.

[c] For questions concerning longest job, sample sizes are based on the number of people who report a longest job on the Client Information Sheet or Client Assessment Form.

[d] Although all sample members were receiving AFDC at the time of random assignment, 33.7 percent had not received AFDC in the quarter prior to random assignment.

[e] Includes Hispanics.

[f] Includes General Equivalency Diploma recipients.

APPENDIX B

APPENDIX B

THE MECHANICS OF ADMINISTERING THE TOPS GRANT DIVERSION WAGE POOL

I. The Grant Diversion Process

In Maine, the diversion of the AFDC grant involved staff from regional WEET offices, regional and central AFDC Income Maintenance Unit (IMU) offices, and Department of Human Services (DHS) accounting staff. Reimbursing employers for the wage subsidy involved both WEET and JTPA staff.

A. Diverting AFDC Grants into the Wage Pool

1. Notification of the Income Maintenance Unit

Once an OJT contract was written for a TOPS client, the regional WEET office notified the regional Income Maintenance Unit (IMU) of the placement. The notification form included information about the employer's name and address, the job start date, initial pay date, wage rate and the number of months the OJT was scheduled to last. The form was filled out manually by the WEET specialist and sent on to the IMU. After additional information was added by IMU, a copy was returned to WEET.

2. Calculations by the IMU

Calculating the amount of money to be diverted into the wage pool for each client was a two step process, done by the regional IMU case-workers. First, it was necessary to identify the period of time during which the funds would be diverted. Second, it was necessary to calculate how the OJT earnings affected the AFDC grant level.

To calculate the period during which the funds were to be diverted,

the IMU caseworker determined what was known as the "effective month of grant diversion opening" and the "effective month of grant diversion ending." These were distinct from the calendar months of the OJT start- and end-dates. Because Maine uses retrospective budgeting, there was a lag (generally of two months) between the point the client started working in an OJT position and the point when the grant level was affected by the new earnings. For example, income received in January would not normally affect an AFDC grant until March.

For this reason, the IMU did not begin diverting the grant as soon as the client started working in an OJT position, but waited until the first month the grant would be affected: this was "the effective month of grant diversion opening." Similarly, the effective grant diversion closing date was calculated from this effective grant diversion opening date rather than from the actual end-date of the OJT contract. Thus, if an OJT contract were written for a period of three months, the funds were diverted for three months after the effective start date, even though the client would have completed the OJT after the first of those three months.

Next, the IMU caseworker calculated how the OJT earnings affected each client's grant. In TOPS, the base grant was "frozen" at the start of the effective OJT period, but the IMU caseworker recalculated the monthly grant throughout the diversion period, using the same income disregards that normally apply to a working recipient. If the income was high enough to make the person ineligible for AFDC, the client did not receive a welfare check. However, her AFDC case was not closed as she remained eligible for Medicaid throughout the grant diversion period.

Recalculating the individual's grant on a monthly basis meant that the

amount of money diverted into the pool each month fluctuated along with the fluctuations in the AFDC grant. The fluctuations reflected the fact that earnings varied from week to week and month to month as the number of hours worked varied. Monthly child-care costs also varied.

Once the effective date of the OJT period was determined, the IMU worker calculated the initial change in benefits and entered it on the notification form sent by WEET, along with the effective start and end of grant diversion and the base (frozen) grant amount. A copy of this form was returned to WEET.

The effective month of the grant diversion opening and closing and the base grant at the start of the grant diversion period were also entered into the computerized AFDC files. This created an automatic trigger to start and end the effective grant diversion period, and a way of keeping track of the amount of money being diverted each month.

If a client terminated her OJT prior to the expected completion date, the WEET specialist notified the IMU worker, identified the reason for the early completion, and indicated the new effective month of grant diversion closure. All of this information was added to the original notification form filled out by WEET.

3. Transferring Funds into the Wage Pool

The dollar amount diverted into the wage pool was the difference between the client's base grant at the effective start of the OJT period and the actual grant she received during each month of the effective OJT period. This calculation was computerized, based on the information in the AFDC files.

Each month, a print-out containing the name of each TOPS client in an

OJT position in the state, her base grant, her currrent grant, and the amount to be diverted into the OJT wage pool was generated from the automated AFDC files. The print-out also computed the total amount to be diverted throughout the state. Copies were sent to the central WEET office, the central IMU office, and the DHS accounting office.

Based on these figures, the DHS accounting office processed the actual transfer of funds from the AFDC account to the grant diversion pool, a separate account. This was simply a bookkeeping process. It was sometimes necessary, however, for the accountant to do a manual adjustment to the diversion calculation. It was possible, for example, that the amounts to be diverted for individual clients would show up as negative figures. These had to be converted to zeroes and the totals recalculated before the funds were transferred into the wage pool account.

B. Using the Wage Pool to Reimburse Employers

The cost of the employer subsidy in TOPS was shared by JTPA and WEET, with WEET providing 70 percent and JTPA, 30 percent. However, to simplify the reimbursement process, it was agreed that when JTPA wrote an OJT contract, JTPA would pay the employer the full subsidy, and then bill WEET for 70 percent of that cost. Considerable lag time developed as many employers did not begin to bill JTPA until three or four months after the start of the OJT position. (They were supplied with a monthly invoice form from JTPA.) Because of this lag, local JTPA offices did not bill WEET on a monthly basis, but at 45- or 90-day intervals.

After the JTPA invoice was received, the accountant in the WEET regional office instructed the regional DHS office to pay the bill, using a general WEET account rather than the special grant diversion wage pool

account. In another bookkeeping transaction, an accountant in the central DHS office arranged to transfer funds out of the wage pool account into the general WEET account to cover the payments for the employer subsidy. This was done on a monthly basis, after central DHS accounting received copies of the invoices paid by each regional DHS office to JTPA.

II. Implementation Issues

Officials in Maine developed a grant diversion process that reflected some of the unique aspects of welfare payments in Maine and which other states interested in using grant diversion need not duplicate. These decisions and their implications for the smooth implementation of the grant diversion wage pool and employer reimbursement warrant discussion.

- Although Maine froze the base grants on which the diversion amount was calculated for the duration of the OJT period, the actual grant was recalculated monthly to reflect changes in the client's income and income disregards.

This was done because the IMU staff felt it was important to treat the TOPS clients, as much as possible, "like everyone else" on AFDC. In terms of the AFDC grant calculation process, the only thing which distinguished the TOPS OJT participants is that their cases were not closed -- and they therefore continued to receive Medicaid -- if their income level made them ineligible for AFDC.

- In order to parallel the lag time inherent in retrospective budgeting for AFDC grant calculations, the grant diversion period was based on an effective OJT opening and closing date.

Prior to the enactment of this procedure, the grant diversion period was calculated from the start of the OJT job rather than from the date when the earnings first affected the grant level. As a result, an insufficient

amount of funds was intially being diverted into the wage pool.

- Because the IMU and WEET computer systems were not compatible, the linkages between the two systems had to be made manually, by physically sending notification of the status of individual clients back and forth between offices.

This increased the likelihood that an individual in OJT might not be entered into the AFDC files or that if the OJT terminated earlier than scheduled, the monthly diversion system would not be halted. Both did occur in the initial months of grant diversion in TOPS.

- The original computer program used by the IMU staff to calculate the amounts to be diverted to the wage pool did not include the end date of the diversion period.

As a result, in some cases funds continued to be diverted for months after an individual left her OJT position. To remedy this, staff first programmed six months -- the maximum length of OJT -- as an end date, and subsequently included the actual end date of the effective grant diversion period.

- The WEET regional staff did not use a special billing code to reimburse JTPA for WEET's share of the OJT subsidy, but instead drew the funds out of the general WEET account.

This necessitated an additional transaction at the central accounting office, because the total amount paid to JTPA in a given month had to be transferred from the wage pool account into the general WEET account.

For all these reasons, there were some problems in the administration of the grant diversion mechanism during the early phase of its administration. At one point, the amount needed to cover the employer payments exceeded what as available in the pool, and regular WEET funds had to be used to cover the difference. A review of the grant diversion records identified funds which should have been diverted, but had not been. New

procedures, including the use of the effective start- and end-dates of grant diversion, programming the end-date of grant diversion into the AFDC system, more intensive monitoring of the computer records, and more staff training, resulted in a smoother-running system. The process continued to require close monitoring and an occasional manual intervention, however.

The experience of managing grant diversion in TOPS led WEET staff to make the following recommendations for the implementation of a grant diversion wage pool in other states: first, the mixture of automated and manual procedures would probably not work well with a much larger-scale grant diversion program; instead, it would be necessary to integrate the WEET and AFDC files. Second, because of the lag time caused by the retrospective AFDC budgeting and the employer's slowness in billing JTPA, it is difficult to predict whether the pool will always have sufficient funds, or whether it is paying for itself at any point in time. For the same reasons, a grant diversion system would probably require a supplemental source of funds to get it started.

APPENDIX C

TABLE C.1

MAINE

ESTIMATED REGRESSION COEFFICIENTS FOR SELECTED MEASURES OF EMPLOYMENT AND AFDC RECEIPT

Regressor	Dependent Variables			
	Ever Employed, Quarters 2-11[a]	Average Total Earnings, Quarters 2-11[$][a]	Ever Received AFDC, Quarters 2-11[a]	Average Total AFDC Income, Quarters 2-11[$][a]
Constant	0.802***	5599.172***	0.980***	6598.520***
	(0.032)	(638.884)	(0.011)	(313.270)
Experimental Status	0.016	1744.830**	0.003	169.934
	(0.039)	(786.748)	(0.014)	(385.774)
Region				
I	—	—	—	—
II	0.022	-2265.256*	0.006	507.587
	(0.061)	(1224.002)	(0.021)	(600.176)
III	0.077	-2368.146**	0.005	428.532
	(0.059)	(1182.571)	(0.021)	(579.861)
IV	-0.069	-3287.434***	-0.007	368.117
	(0.056)	(1128.633)	(0.020)	(553.413)
V	0.014	-2876.745***	0.003	296.050
	(0.054)	(1086.132)	(0.019)	(532.573)
Age				
24 Years Or Less	0.051	-234.597	0.028	341.206
	(0.057)	(1144.093)	(0.020)	(560.994)
25 to 29 Years	—	—	—	—
30 Years Or More	0.019	364.270	0.008	-266.946
	(0.045)	(914.945)	(0.016)	(448.633)
No High School Degree	-0.157***	-3103.450***	-0.016	586.816
	(0.043)	(871.691)	(0.015)	(427.424)
Never Married	0.112**	644.148	-0.002	-2.832
	(0.051)	(1018.587)	(0.018)	(499.453)

(continued)

TABLE C.1 (continued)

Regressor	Dependent Variables			
	Ever Employed, Quarters 2-11[a]	Average Total Earnings, Quarters 2-11[$][a]	Ever Received AFDC, Quarters 2-11[a]	Average Total AFDC Income, Quarters 2-11[$][a]
Number of Children				
One	-0.085*	726.416	-0.021	-1983.941***
	(0.044)	(879.539)	(0.015)	(431.272)
Two or More	-0.002	138.793	-0.002	643.572***
	(0.015)	(297.279)	(0.005)	(145.767)
Received AFDC for More than Eight Quarters Prior to Random Assignment	0.023	-536.324	-0.028*	498.731
	(0.041)	(823.825)	(0.014)	(403.954)
Held Job Anytime During Four Quarters Prior to Random Assignment	0.163***	-142.042	0.030*	-131.413
	(0.045)	(912.092)	(0.016)	(447.234)
Earnings Greater than $1500 During Four Quarters Prior to Random Assignment	-0.061	2884.282**	-0.009	-307.377
	(0.066)	(1323.320)	(0.023)	(648.876)
Win Mandatory	0.012	860.482	0.000	-984.733**
	(0.045)	(899.892)	(0.016)	(441.253)
Number of Observations	444	444	444	444
Number of Experimentals	297	297	297	297
Number of Controls	147	147	147	147
Degrees of Freedom For Error	428	428	428	428
Error Mean Square	0.143	58257821.871	0.018	14007079.717
R-Square	0.090	0.084	0.032	0.178
Mean of Dependent Variable	0.813	6766.22	0.982	6712.191

(continued)

TABLE C.1 (continued)

SOURCE: MDRC calculations from State of Maine AFDC and Unemployment Insurance earnings records.

NOTES: Ordinary least squares regression coefficients in this table correspond to impact estimates presented in Tables 5.2, 5.3, 5.9, and 5.10. An analysis of covariance procedure was used to control for 14 kinds of differences in characteristics before random assignment. See Ostle (1975, p. 461). Standard errors of coefficients are indicated with parentheses.

These calculations include sample members not employed and sample members not receiving AFDC.

A two-tailed t-test was applied to each coefficent estimate. Statistical significance levels are indicated as: *=10 percent; **=5 percent; ***=1 percent.

[a]Quarter 1, the quarter of random assignment, may contain some income from the period prior to random assignment and is therefore excluded from cumulative measures of employment, earnings, and AFDC receipt.

TABLE C.2

MAINE

IMPACTS OF THE TOPS PROGRAM ON THE JOINT DISTRIBUTION OF EARNINGS AND AFDC INCOME, QUARTERS 1-11

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Employment and Welfare Status, Quarter 1 [%]				
Had No Earnings, Received No AFDC Payments	1.4	0.8	0.7	0.488
Had Some Earnings, Received No AFDC Payments	0.0	0.0	0.0	--
Had No Earnings, Received Some AFDC Payments	82.2	74.7	7.5*	0.060
Had Some Earnings, Received Some AFDC Payments	16.4	24.7	-8.2**	0.033
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 2 [%]				
Had No Earnings, Received No AFDC Payments	1.7	0.8	1.2	0.325
Had Some Earnings, Received No AFDC Payments	0.6	1.4	-0.8	0.420
Had No Earnings, Received Some AFDC Payments	74.8	64.6	10.2**	0.028
Had Some Earnings, Received Some AFDC Payments	22.9	33.4	-10.6**	0.018
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 3 [%]				
Had No Earnings, Received No AFDC Payments	3.3	5.0	-1.7	0.386
Had Some Earnings, Received No AFDC Payments	6.9	5.2	1.7	0.503
Had No Earnings, Received Some AFDC Payments	53.9	55.7	-1.8	0.723
Had Some Earnings, Received Some AFDC Payments	36.0	34.1	1.8	0.707
Total	100.0	100.0	0.0	

[continued]

TABLE C.2 [continued]

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Employment and Welfare Status, Quarter 4 [%]				
Had No Earnings, Received No AFDC Payments	5.0	4.9	0.0	0.985
Had Some Earnings, Received No AFDC Payments	13.2	10.0	3.3	0.324
Had No Earnings, Received Some AFDC Payments	43.0	51.3	-8.3	0.109
Had Some Earnings, Received Some AFDC Payments	38.8	33.8	5.0	0.310
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 5 [%]				
Had No Earnings, Received No AFDC Payments	7.5	8.7	-1.2	0.682
Had Some Earnings, Received No AFDC Payments	15.2	14.2	1.1	0.767
Had No Earnings, Received Some AFDC Payments	42.8	50.0	-7.4	0.149
Had Some Earnings, Received Some AFDC Payments	34.7	27.2	7.5	0.108
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 6 [%]				
Had No Earnings, Received No AFDC Payments	6.3	9.8	-3.5	0.200
Had Some Earnings, Received No AFDC Payments	18.9	18.9	1.0	0.794
Had No Earnings, Received Some AFDC Payments	45.8	49.5	-3.7	0.471
Had Some Earnings, Received Some AFDC Payments	27.9	21.8	6.1	0.162
Total	100.0	100.0	0.0	

[continued]

TABLE C.2 (continued)

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Employment and Welfare Status, Quarter 7 [%]				
Had No Earnings, Received No AFDC Payments	7.9	11.9	-3.9	0.188
Had Some Earnings, Received No AFDC Payments	22.0	19.4	2.6	0.525
Had No Earnings, Received Some AFDC Payments	41.8	43.1	-1.5	0.789
Had Some Earnings, Received Some AFDC Payments	28.4	25.6	2.8	0.538
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 8 [%]				
Had No Earnings, Received No AFDC Payments	10.6	14.0	-3.4	0.304
Had Some Earnings, Received No AFDC Payments	25.0	22.9	2.1	0.627
Had No Earnings, Received Some AFDC Payments	39.2	42.6	-3.5	0.493
Had Some Earnings, Received Some AFDC Payments	25.2	20.5	4.8	0.273
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 9 [%]				
Had No Earnings, Received No AFDC Payments	11.4	14.4	-3.1	0.388
Had Some Earnings, Received No AFDC Payments	25.9	25.3	0.5	0.905
Had No Earnings, Received Some AFDC Payments	38.1	42.2	-4.1	0.414
Had Some Earnings, Received Some AFDC Payments	24.7	18.1	6.6	0.122
Total	100.0	100.0	0.0	

(continued)

TABLE C.2 (continued)

Outcome and Follow-Up Period	Experimentals	Controls	Difference	p
Employment and Welfare Status, Quarter 10 [%]				
Had No Earnings, Received No AFDC Payments	13.0	21.3	-8.2**	0.028
Had Some Earnings, Received No AFDC Payments	28.1	26.3	1.8	0.698
Had No Earnings, Received Some AFDC Payments	36.2	39.1	-2.9	0.585
Had Some Earnings, Received Some AFDC Payments	22.7	13.4	9.3**	0.023
Total	100.0	100.0	0.0	
Employment and Welfare Status, Quarter 11 [%]				
Had No Earnings, Received No AFDC Payments	15.6	18.9	-3.3	0.393
Had Some Earnings, Received No AFDC Payments	28.6	31.3	-2.7	0.557
Had No Earnings, Received Some AFDC Payments	34.1	31.9	2.2	0.648
Had Some Earnings, Received Some AFDC Payments	21.8	17.9	3.8	0.357
Total	100.0	100.0	0.0	
Sample Size	297	147		

SOURCE AND NOTES: See Table 5.2.

APPENDIX D

APPENDIX D

DECOMPOSITION OF IMPACTS

This appendix explains the calculations reported in Table 5.8. Any full-sample cumulative earnings impact is the sum of three components. Part of the earnings impact is due to *(1)* the experimental-control difference in average rates ever employed. The other two components are due to experimental-control differences among those who ever were employed. One component arises from *(2)* the difference in the average number of quarters with employment; the other stems from *(3)* the difference in average earnings per quarter with employment.

For the Maine TOPS evaluation, 297 experimentals and 147 controls were chosen at random. More generally, let n_T treatment group members *(T)* and n_C control group members *(C)* be chosen at random. The total sample size is $n = n_T + n_C$. Let

$$M_i = 1$$

if sample member i is employed, $i = 1, \ldots, n$, and let it equal zero otherwise. Then

$$\overline{M}_T = (1/n_T) \sum_{i \in (T)} M_i$$

is the fraction employed, and 1 - M_T-bar is the fraction not employed, among those assigned to treatment. The absolute number employed among experimentals is

$$n_{T1} = \sum_{i \in (T)} M_i,$$

while the number not employed among experimentals is

$$n_{T0} = n_T - n_{T1}.$$

Similarly, among control sample members, the proportion employed is

$$\overline{M}_C = (1/n_C) \sum_{j \in (C)} M_j,$$

and *1* - M_C-bar is the fraction not employed. The absolute number employed among controls is

$$n_{C1} = \sum_{j \in (C)} M_j,$$

while the number not employed among controls is

$$n_{C0} = n_C - n_{C1}.$$

Let y_i' be the raw *unadjusted* earnings outcome for sample member i. The adjusted impact *d* is the coefficient of a dummy variable for membership in the treatment group in the regression equation

$$y_i' = a + ds_i + c'z_i + e_i.$$

Using coefficients estimated from this regression, where z_i is the ith sample member's vector of covariates measured before random assignment, and z-bar is the grand mean for these covariates, *covariate-adjusted outcome scores* are defined as

$$y_i = y_i' - \hat{c}'(z_i - \bar{z}).$$

Then

$$\bar{y}_T = (1/n_T) \sum_{i \in (T)} y_i$$

is adjusted mean earnings in the treatment group, and

$$\bar{y}_C = (1/n_C) \sum_{j \in (C)} y_j$$

is adjusted mean earnings in the control group. The quantity

$$d = \bar{y}_T - \bar{y}_C$$

is the *adjusted sample impact* of the treatment. Its value is precisely the same as the value of the coefficient of the dummy variable in the regression equation; see Ostle (1975, pp. 215, 461).

Earnings are zero for any sample member who is not employed. This observation allows adjusted mean earnings for controls to be expressed as

$$\bar{y}_C = \frac{1}{n_{C0} + n_{C1}} \sum_{j=1}^{n_{C0}+n_{C1}} y_j$$

$$= \frac{1}{n_{C0} + n_{C1}} \left\{ \sum_{j \in (C) \ni M_j = 1} y_j + \sum_{j \in (C) \ni M_j = 0} y_j \right\}$$

$$= \frac{n_{C1}}{n_{C0} + n_{C1}} \left\{ \frac{1}{n_{C1}} \sum_{j \in (C) \ni M_j = 1} y_j \right\}$$

$$= \bar{M}_C \bar{y}_{C \ni M=1}.$$

Similarly, mean adjusted earnings among experimentals may be expressed as

$$\bar{y}_T = \bar{M}_T \bar{y}_{T \ni M=1}.$$

The adjusted impact is

$$d = \bar{y}_T - \bar{y}_C$$
$$= \bar{M}_T \bar{y}_{T,N-1} - \bar{M}_C \bar{y}_{C,N-1}.$$

This expression is very similar to expression (7) in Oaxaca (1973).[1] Two alternative decompositions of such an expression carried out by Oaxaca may be combined very easily. Where V is any fraction between zero and unity,

$$d = V\left(\bar{M}_T \bar{y}_{T,N-1} - \bar{M}_C \bar{y}_{C,N-1}\right) + (1-V)\left(\bar{M}_T \bar{y}_{T,N-1} - \bar{M}_C \bar{y}_{C,N-1}\right)$$
$$= V\left(\bar{M}_T \bar{y}_{T,N-1} + \bar{M}_T \bar{y}_{C,N-1} - \bar{M}_T \bar{y}_{C,N-1} - \bar{M}_C \bar{y}_{C,N-1}\right)$$
$$+ (1-V)\left(\bar{M}_T \bar{y}_{T,N-1} + \bar{M}_C \bar{y}_{T,N-1} - \bar{M}_C \bar{y}_{T,N-1} - \bar{M}_C \bar{y}_{C,N-1}\right)$$

$$= V\left\{\bar{M}_T\left(\bar{y}_{T,N-1} - \bar{y}_{C,N-1}\right) + \bar{y}_{C,N-1}\left(\bar{M}_T - \bar{M}_C\right)\right\}$$
$$+ (1-V)\left\{\bar{M}_C\left(\bar{y}_{T,N-1} - \bar{y}_{C,N-1}\right) + \bar{y}_{T,N-1}\left(\bar{M}_T - \bar{M}_C\right)\right\}$$

$$= \left[V\bar{M}_T\left(\bar{y}_{T,N-1} - \bar{y}_{C,N-1}\right) + (1-V)\bar{M}_C\left(\bar{y}_{T,N-1} - \bar{y}_{C,N-1}\right)\right]$$
$$+ \left[V\bar{y}_{C,N-1}\left(\bar{M}_T - \bar{M}_C\right) + (1-V)\bar{y}_{T,N-1}\left(\bar{M}_T - \bar{M}_C\right)\right]$$

$$= \left[\left\{V\bar{M}_T + (1-V)\bar{M}_C\right\}\left(\bar{y}_{T,N-1} - \bar{y}_{C,N-1}\right)\right]$$
$$+ \left[\left\{V\bar{y}_{C,N-1} + (1-V)\bar{y}_{T,N-1}\right\}\left(\bar{M}_T - \bar{M}_C\right)\right].$$

The last member of this expression is composed of two bracketed terms. The first bracketed term is the amount of the adjusted earnings impact explained by differences in earnings while employed. It is the experimental-control difference in adjusted earnings while employed,

[1]Ronald Oaxaca. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14, 3 (October 1973): 693-709.

weighted by the average employment rate. The second bracketed term is the amount of the adjusted earnings impact explained by differences in rates of employment. It is the difference in employment rates, weighted by average adjusted earnings while employed.

Thus average earnings, which is the product of two factors, has an impact which may be expressed as the sum of two terms, one for each factor. The first factor is the average amount of earnings while employed. The second factor is the average rate of employment.

Similarly, the amount of earnings while employed may be expressed as the product of two factors, and the experimental-control difference in earnings while employed may be expressed as the sum of two terms. For those who ever were employed, the average number of quarters with employment, *k-bar*, and average earnings per quarter with employment, *w-bar*, are the two factors. The second factor is defined by

$$\bar{w}_T = \bar{y}_{T\ni M=1} \; / \; \bar{k}_T$$

and

$$\bar{w}_C = \bar{y}_{C\ni M=1} \; / \; \bar{k}_C .$$

The two terms of the decomposition become

$$\begin{aligned} \bar{y}_{T\ni M=1} - \bar{y}_{C\ni M=1} &= \bar{k}_T \bar{w}_T - \bar{k}_C \bar{w}_C \\ &= [\{V\bar{k}_T + (1-V)\bar{k}_C\}(\bar{w}_T - \bar{w}_C)] \\ &\quad + [\{V\bar{w}_C + (1-V)\bar{w}_T\}(\bar{k}_T - \bar{k}_C)]. \end{aligned}$$

When the two decompositions are put together into one expression, the full-sample impact on earnings becomes the sum of three terms:

$$
\begin{aligned}
d &= \{V\bar{M}_T + (1-V)\bar{M}_C\}[\{V\bar{k}_T + (1-V)\bar{k}_C\}(\bar{u}_T - \bar{u}_C) \\
&\quad + \{V\bar{u}_C + (1-V)\bar{u}_T\}(\bar{k}_T - \bar{k}_C)] \\
&\quad + [\{V\bar{y}_{C,M=1} + (1-V)\bar{y}_{T,M=1}\}(\bar{M}_T - \bar{M}_C)] \\
&= [\{V\bar{M}_T + (1-V)\bar{M}_C\}\{V\bar{k}_T + (1-V)\bar{k}_C\}(\bar{u}_T - \bar{u}_C)] \\
&\quad + [\{V\bar{M}_T + (1-V)\bar{M}_C\}\{V\bar{u}_C + (1-V)\bar{u}_T\}(\bar{k}_T - \bar{k}_C)] \\
&\quad + [\{V\bar{k}_C\bar{u}_C + (1-V)\bar{k}_T\bar{u}_T\}(\bar{M}_T - \bar{M}_C)].
\end{aligned}
$$

The first term is the amount of the full-sample earnings impact due to the experimental-control difference in average earnings per quarter with employment, among those who ever were employed. The second term is the amount due to the difference in the average number of quarters with employment, among those who ever were employed. The third term is the amount due to the difference in average rates ever employed. When divided by *d*, the full-sample impact, these three terms become, respectively, the proportions in columns two, three, and four of Table 5.8. Parameter V was given the value 0.5, so that Oaxaca's two basic alternative decompositions were weighted equally.

A good example to illustrate the decomposition of impacts with this formula is the first line of Table 5.8. Parameter $d = y_T\text{-}bar - y_C\text{-}bar$ in this case is the cumulative impact on earnings from Quarters two through eleven. Table 5.3 shows that d = \$1,744.83, $y_T\text{-}bar$ = \$7,344.00, and $y_C\text{-}bar$ = \$5,599.17. From the sample sizes in Table 5.7, $M_T\text{-}bar$ = 243/297, and $M_C\text{-}bar$ = 118/147. Cross-tabulations of numbers of quarters with employment show that, among those ever employed, $k_T\text{-}bar$ = 4.6296 / $M_T\text{-}bar$, and $k_C\text{-}bar$ = 4.3197 / $M_C\text{-}bar$. This means that

$$\bar{y}_{T,M=1} = \bar{y}_T/\bar{M}_T = \$8,976.00;$$

$$\bar{y}_{C,M=1} = \bar{y}_C/\bar{M}_C = \$6,975.24;$$

$\bar{u}_T = \bar{y}_{T,M-1}/\bar{k}_T = \$1,586.31;$

$\bar{u}_C = \bar{y}_{C,M-1}/\bar{k}_C = \$1,296.19.$

Substituting these values into the last formula above shows that the amount of the cumulative earnings impact due to the difference in cumulative employment rates was $123.31; the amount due to the difference in number of quarters with employment, among those ever employed, was $323.67; and the amount due to the difference in average earnings per quarter with employment, among those ever employed, was $1,297.88. Dividing each of these amounts by $1,744.83 produces the entries in the first row of Table 5.8.

APPENDIX E

APPENDIX E

ESTIMATING IMPACTS OF RECEIVING SERVICES

I. Introduction and Summary

This Appendix discusses the methodology and findings for analyzing the TOPS impacts for those participating experimentals actually receiving services. Given a number of key assumptions, participant impacts can be derived from overall experimental impacts presented in the text by multiplying them by an adjustment factor. Because rates of participation by experimentals were quite high in TOPS, impacts of actually receiving services are fairly close to the impacts of assignment to services presented in the text; a reasonable value for the adjustment factor is 1.12. Thus the adjustment is not crucial for evaluating TOPS. However, an explanation of the adjustment may prove useful in planning and evaluating similar programs.

II. The Impact of Participation in TOPS

Chapter III explained in great detail the services available to the 297 experimentals in the research sample. It was also made clear that not everyone who was assigned to experimental status actually participated in all or even in any of the components of TOPS. In particular, only 91 of the 297 experimentals actually received the subsidized job which was the key element of TOPS, and 10.4 per cent of assignees never received any TOPS services. However, everyone assigned to experimental status was included

when calculating average impacts of assignment to TOPS.

Just as impacts of assignment do not take into account nonparticipation by experimentals, they also do not adjust for participation in TOPS-like activities by controls. As explained in Chapter IV, none of the 147 controls received the complete sequence of pre-vocational training, field placement, and wage subsidy which constituted the entire TOPS treatment. However, controls were eligible for an array of WEET services which included TOPS-like compnents. Table 4.2 shows that 33 controls received services similar to one or two of the components of TOPS.

In Table 4.2, it was pointed out that not all experimentals received the TOPS treatment; 266 (or 89.6 percent) received one, two or three of the components while 31 (or 10.4 percent) received none. The average impact for experimentals is thus a weighted average of two parts. One component, which gets a weight of 0.896, is the average impact among those who received TOPS. The other component, which receives a weight of 0.104, is the mean impact among those who did not receive TOPS.

Similarly, it was pointed out in Chapter IV that 33 (or 22.4 percent) of the 147 controls participated in one or two TOPS-like activities. Thus 114 (or 77.6 percent) participated in no TOPS-like activities. The average impact for controls is a weighted average of two components. One component, which receives a weight of 0.224, is the mean impact outcome among those controls who received some TOPS-like service. The other component, which is weighted by 0.776, is the mean impact among those who did not receive TOPS-like services.

An impact of assignment is the difference between average outcomes for those assigned to the experimental group and those assigned to the control

group. Impacts of assignment would be much easier to interpret if all of the experimentals had received TOPS, and if none of the controls had received TOPS-like services. In such a simple state of affairs, all of the average impact of TOPS would have been spread evenly over the experimental group, and TOPS-like activities would have had no effect on the control group. However, it has already been seen that experimental and control behavior was more complicated. The basic problem here is that four outcomes are available for estimating one impact of receiving services. Average outcomes are available for those who did and did not receive TOPS or similar services, in both the experimental and the control groups. The impact of assignment is the difference between the impact on experimentals and the impact on controls, and each impact has two components.

One simple solution to this problem is to make assumptions about the components. Among experimentals, suppose that the impact of TOPS on those who did not receive it is precisely zero. This would mean that any impact of participation is concentrated entirely among the 89.6 percent of experimentals who did receive TOPS. Furthermore, suppose that, among the 22.4 percent of controls who received some TOPS-like services, there was an impact of participation exactly M times the impact among the participants in the experimental group.

These assumptions allow the impact of assignment to TOPS to be reinterpreted:

Average impact of assignment

= Average impact among all experimentals

- average impact among all controls

= 0.896 (average impact of participation)

+ 0.104 (zero impact on nonparticipating experimentals)

- M (0.224) (average impact of participation)

- 0.776 (zero impact on nonparticipating controls)

= (0.896 - 0.224M) (average impact of participation).

Parameter M is the effectiveness of participating for controls relative to the effectiveness of participating for experimentals.[1] According to the last term of this equation, when parameter M is unity, each average impact of assignment to TOPS reported in the tables presented above is 0.672 times the average impact of participation in TOPS. To get the corresponding impact of participation, it is necessary only to divide the impact of assignment by 0.672; that is, to multiply it by (1/0.672) = 1.49.

III. Assumptions

Two assumptions were made in order to calculate the adjustment factor of 1.49 for getting impacts of receiving services. First, it was assumed that impacts on nonparticipants were precisely zero. Second, it was assumed that the impact on participating controls was the same as the impact on participating experimentals (M=1). How reasonable are these assumptions?

Among controls and among experimentals, participation was defined as receiving any TOPS or TOPS-like services. Only if a sample member received none of the three components was she considered a nonparticipant. If sanctions had been applied to such nonparticipants, one might expect smaller AFDC income and perhaps greater rates of employment to replace AFDC income lost to sanctions. Even the mere threat of sanctions might have strong

deterrent effects on earnings and welfare income. Since sanctions only very rarely followed failure to appear for prevocational training, and since there was no evidence of long-term TOPS contact with nonparticipants, it seems reasonable to assume TOPS had no effect on experimentals who received none of its components. Since there was no post-assignment TOPS contact at all with nonparticipating controls, it seems reasonable to assume TOPS had no effect on nonparticipating controls.

The second assumption is much more problematic. For example, none of the controls, but 27.3 percent of experimentals, received all three components of TOPS. Moreover, Chapter VI pointed out that the TOPS-like services received by controls were cheaper and less intensive than TOPS services. Apparently, the average treatment received by those 33 controls who got TOPS-like services was weaker than the average TOPS treatment received by those experimentals who got TOPS. Thus it is unlikely that the effect of TOPS-like services on participating controls was as large as the effect of TOPS on participating experimentals.

If the second assumption is dropped, and it is assumed instead that the effect of TOPS-like services on participating controls is zero, then the arithmetic presented earlier changes, so that the adjustment factor is (1/0.896) = 1.12. Since this alternative assumption may be a little weak, an overall sensitivity analysis of the adjustment might conclude that, to calculate an impact of participation, the impact of assignment should be multiplied by a factor somewhere between 1.12 and 1.49.[2]

An alternative approach is to test the assumption of a zero effect on nonparticipants directly. As discussed in Cave, 1987, participation may be modeled, and predicted participation used to separate controls as well as

experimentals into groups for comparison of outcomes. However, the success of such an approach depends on the success of the participation model and may be sensitive to the particular functional form chosen for model error.

IV. Random Variation in Component Weights

Besides its assumptions about the magnitudes of impacts in some groups of experimentals and controls, the adjustment procedure just presented has another basic weakness. Randomness in the weights given subgroups of experimentals and controls was not taken into account. Every member of the target population for the TOPS program is a potential member of one of the four groups described and given the weights indicated above. If a different sample of 444 experimentals and controls had been drawn, the weights used might have been quite different, because different proportions of the four groups might have been selected.

In the equation presented above, the impact of receiving services is the ratio of the impact of assignment to an expression involving two of the weights. Since the numerator and the denominator of this ratio are correlated, the effect of participation is a ratio of correlated random variables. Proper point estimators and standard errors of such a ratio cannot be obtained simply by dividing one sample value by another.[3] A modified ratio estimator presented in Cave (1988) remedies this problem. The approximate variance of this modified ratio estimator is the same as the approximate variance of the crude ratio estimator presented above. For the TOPS sample of 444, the two estimators are indistinguishable. When M=0, the modified estimate is 1.12, with a standard error of 0.022. When M=1, the point estimate is 1.49, and the standard error is 0.086.

V. Summary

When all those assigned to a program treatment actually receive it, and none of those assigned to the control group receive similar treatment, there are only two groups of sample members to consider. The program impact in such a situation is simply the difference between average outcomes for the two groups. In practice, there are four groups of sample members to consider. In the Maine TOPS evaluation, while 89.6 percent of experimentals received at least one TOPS component, 10.4 percent of experimentals did not receive any of its components. While 77.6 percent of controls received no TOPS-like service, because such services were part of an array of services intended to be offered to controls, 22.4 percent of those assigned to the control group did receive at least one TOPS-like service.

The impacts of assignment to TOPS presented in the text are unbiased differences in average outcomes between all assigned to the program and all assigned to the control group. The presence of two groups of experimentals and two groups of controls makes the observed difference in average outcome between all experimentals and all controls interpretable as the difference between two impacts: the impact on experimentals, and the impact on controls. To transform the observed impact of assignment into an impact of participation, the observed impact may be multiplied by a rough adjustment factor. For the TOPS evaluation, a reasonable value for this adjustment factor is 1.12.

FOOTNOTES

CHAPTER I

1. Auspos et al., 1985.

2. The Work Opportunities Committee published its report and recommendations in Women, Work and Welfare, September, 1981.

3. Work Opportunies Committee, 1981, p. 15.

4. This component was operated under the rules of WIN Work Experience rather than those of the Community Work Experience Program (CWEP). CWEP specifies that the number of hours worked at a worksite per month by a participant must be equal to the AFDC recipients' grant divided by the minimum wage.

5. Data on the September 30, 1983 caseload were provided by the Division of Welfare Employment, Maine Department of Human Services. Data on WEET service provision in federal fiscal year 1984 (October 1, 1983 - September 30, 1984) are published in the Division of Welfare Employment's Service Delivery Plan for FFY 1985. The latter data count persons active in more than one activity and the total number active for each activity.

6. For a summary of the findings in other states see Gueron, 1987. For individual state reports, see the list of MDRC publications at the end of this report.

7. MDRC Board of Directors, 1980.

8. Arizona, Florida, New Jersey, Texas and Vermont also received OFA funds. MDRC has published two reports on the implementation of grant diversion programs in these states and Maine, and is also conducting an impact and benefit-cost evaluation of the New Jersey program. See Bangser et al., 1985 and 1986.

CHAPTER II

1. For variations, see Table 1.1. JTPA staff were also involved in assessment interviews in some cycles in Lewiston, Augusta, Bath and Bangor.

2. Bane and Ellwood, 1983.

3. This sample size differs, by 12, from the total number of enrollees stated in the report on interim findings as randomly assigned between October 1983 and December 1984. That sample size was based upon the number of random assignments called in

to MDRC. Eleven cases included in that first report total were either repeat random assignments -- one person assigned more than once -- or cases with irreparable data problems. These random assignments were subsequently removed from the sample. Also, one sample member was male and was therefore taken out of the sample.

4. In fiscal year 1982, 45 percent of new WEET registrants were exempt from the mandatory registration requirement; in fiscal year 1983, the proportion rose to 53 percent, according to data provided by the Division of Welfare Employment.

5. The 16,556 AFDC cases in this January 1983 profile consist of recipients in Maine's AFDC program, excluding refugees in the Resettlement Program, recipients with grants less than $10 per month, and recipients not receiving an AFDC payment during the month of January 1983.

6. In January 1983 and again in January 1985, the Maine Department of Human Services compiled descriptive data on the AFDC caseload in these study months. The first study month showed less than a third of the caseload to have received AFDC for more than the 24 consecutive months prior to this study month. In January 1985, almost one half of the caseload had been receiving AFDC for more than the 24 consecutive months prior to the study month. It would appear that the Maine caseload was shifting towards having more long term recipients. The random assignment period for this demonstration fell between these two study months, and the proportion of the sample that received AFDC for more than the 24 consecutive months prior to random assignment is between these two figures, 32 percent. This increase in the number of long term recipients coincides with the changing eligibility rules in Maine, as described in Chapter IV.

7. Calculated from the MDRC Client Information Sheets and data provided by the Division of Welfare Employment on the WEET caseload as of April 1, 1984. The TOPS sample includes 425 individuals; data for the remainder of the sample were missing. The WEET registrant caseload as of April 1, 1984 included 7,432 individuals; educational data were available for only 7,186 of these individuals.

8. See Footnote 4.

9. Sixteen sample members did not complete the CIS at all. For these enrollees all the demographic variables from this source will be missing. For five other sample members, a few specific pieces of demographic information are missing. For the impact analysis, the modal values for similar sample members (that is, enrollees with the same employment and welfare

receipt history within the same region) were substituted for these missing observations.

10. The reliance on administrative records to measure outcomes offers many advantages as well as some limitations. Since administrative records do not require ongoing contact with sample members, they are a less expensive way to collect data, and result in fewer missing observations in the later follow-up periods. Administrative records also do not depend on the ability of individuals to recall precise but important information, such as dates, earnings or the length of enrollment in program activities. However, administrative records are limited in the types of outcomes that they measure. Issues of quality and completeness will be addressed within the discussion of each source.

11. Calendar quarters are three month groups beginning with January of each year. Quarter 1 is January, February and March; quarter 2 is April, May and June; quarter 3 is July, August and September; and quarter 4 is October, November and December.

12. First, employment data reported by the state UI system was compared with self-reported employment prior to random assignment from the CIS. Thirty-three percent of the 12 sample members who reported being employed more than 18 months in the two years prior to random assignment did not have UI-reported earnings in the year prior to random assignment. This figure was slightly higher than the percentages calculated from the same comparison in other states in MDRC's Demonstration of State Work/Welfare Initiatives. Second, job placement data from the WEET tracking system was compared with UI-reported earnings. Two percent of the 47 sample members who were randomly assigned in the last month of a calendar quarter and placed within 12 months after random assignment, did not have earnings reported to the UI system in the second through fifth quarters after random assignment.

13. The aggregation of monthly AFDC payments into calendar quarter amounts is unlike the measures used in other states in MDRC's Demonstration of State Work/Welfare Initiatives. In other studies, the AFDC monthly grants were summed into three month totals starting with the month of random assignment.

14. Automated payment systems are not generally intended to record all payments actually made to welfare recipients. There were occasions when checks were hand-written to clients. It was therefore necessary to determine whether the research data were considered sufficiently complete to estimate program impacts.

The automated data for 41 cases were compared with the case-files for these cases. In total, 188 months of data were checked. In 88 percent of these months of data, the payment on the automated file matched the casefile records. The remaining unconfirmed months were all discrepancies of dollar amounts (i.e., there was a recorded payment in the casefile, but the check written from the automated file was for a different amount) except one month where there was a check written and, according to the casefile, one should not have been written.

CHAPTER III

1. Auspos et al., 1985.

2. Auspos et al., 1985, p. 49.

3. These reasons are based on participation logs kept by WEET staff. See Auspos et al., 1985, pp. 47-48.

4. The average total time to complete the TOPS sequence, for experimentals who entered all three components, was estimated from WEET Information System data and supplemental OJT completion information supplied by WEET staff. The average number of months between random assignment and the start of OJT (7.1 months) was added to the average actual duration of the OJT (16.8 weeks) for a total of 11 months until the end of participation.

5. Auspos et al., 1985, p. 72.

6. The three locations were Bath, Damariscotta and Portland. Auspos et al., 1985, p. 64.

7. The interviews are analyzed in detail in Auspos et al., 1985, pp. 65-69.

8. For the 118 experimentals who entered work experience but did not continue into OJT, employment and AFDC statuses after participation in work experience were assessed. Three months after the start of work experience was considered the month work experience would have been completed, if completed according to schedule. Earnings are measured on a quarterly basis. Therefore, if this month was the first month within a calendar quarter (i.e., January, April, July or October) employment was indicated by earnings within that quarter. Otherwise, employment was indicated by earnings in the following quarter.

9. Between October 1983 and October 1984, Maine's JTPA system placed close to 200 AFDC recipients in OJT (including TOPS participants), and WEET placed an additional 50 registrants in OJT. Auspos, et. al., 1985, p. 51.

10. The minimum wage in Maine rose from $3.35 an hour to $3.45 an hour in January 1985, and to $3.55 an hour in January 1986.

11. Auspos et al., 1985, p. 80.

12. Auspos et al., 1985, p. 76.

13. Bangser et al., 1986.

14. Reasons for non-completion and length of stay information were calculated by MDRC from WEET-reported data.

15. A detailed analysis of the interviews is in Auspos et al., 1985, pp. 79-83.

16. The process of estimating subsidy levels in grant diversion programs is discussed in Bangser et al., 1986. The actual amount of AFDC payments diverted into the wage pool for each sample member participating in OJT were obtained from WEET Grant Diversion Reports for the period from April 1984 through July 1986. These amounts were summed for all cases across this entire time period.

    An estimation of the total wage subsidy owed to employers was calculated from wage and hours information in the TOPS OJT contracts, and supplemental data on OJT completions supplied by WEET staff. This subsidy was calculated as: 0.5 (OJT starting hourly wage x OJT actual length-of-stay x OJT scheduled hours per week) = Actual Payments to Employers.

CHAPTER IV

1. Bane and Ellwood, 1983.

2. This information is based on: Bureau of the Census, U.S. Department of Commerce, 1987, p.393, Table 668; Bureau of the Census, U.S. Department of Commerce, 1981, Part 21, Maine, Vol. 1, Chapter C, p. 18; and Ross and Danziger, 1984, Table 1.

3. Bureau of the Census, U.S. Department of Commerce, 1987, p. 393, Table 668; and Ross and Danziger, 1984, Table 1.

4. Work Opportunities Committee, 1981, p. 15; and Levitan and Shapiro, 1987.

5. AFDC Statistical Resource: Selected Characteristics of Cases and Persons Receiving AFDC Benefits, 1983, Table 16.

6. The Federal Deficit Reduction Act (DEFRA) of 1984 modified the OBRA provisions in several key areas. DEFRA raised the gross income test from 150 percent of need to 185 percent of need. It also replaced the four-month limit on the $30 disregard with a twelve-month limit, and extended the $75 work expense disregard to part-time workers as well as full-time workers.

7. Countable income includes both unearned income and countable earnings.

8. Characteristics of State Plans for Aid to Families with Dependent Children, 1985, pp. 337-8, and 1987, pp. 402-3.

9. Maine Public Assistance Payments Manuals.

10. Office of Family Assistance, U.S. Department of Health and Human Services, 1987, pp. 402-3.

11. Communication with Bureau of Labor Statistics, 1987.

12. Communication with Maine Department of Labor, 1987.

13. Separate estimates of the cost of pre-vocational training for controls were not available.

CHAPTER V

1. Average experimental and control group outcomes reported here are adjusted means from an analysis of covariance procedure controlling the difference in outcomes for 14 individual characteristics before random assignment. See Ostle, 1975, p. 461 and Appendix Table C.1.

2. When an impact is statistically significant, if the effect of the program on its target population really were zero, a difference as large as that observed in the sample would occur by chance no more than 10 percent of the time. Thus a statistically significant experimental-control difference can be generalized beyond the particular sample drawn for the evaluation to draw inferences about the effect of the program on its target population.

3. The minimum sample size needed for statistical significance increases as the true program effect becomes smaller, as the variance of the outcome increases, as the R-square of the impact equation declines, as the sample split between experi-

mentals and controls becomes more uneven, as covariate differences between groups increase, and as the statistical significance level decreases. See Cave, 1987.

4. There is a statistical procedure that can yield an adjustment factor that will convert impacts of assignment to services to impacts of receiving services. For TOPS impacts this adjustment factor is 1.12. See Appendix E for the derivation.

5. True impacts on those placed and not placed in subsidized jobs would entail comparisons between members of each experimental group and their unknown counterparts in the control group. It is possible that true impacts on those placed in OJT could be positive for welfare outcomes and negative for labor market outcomes. However, if true impacts on those placed in OJT had the same signs and approximate magnitudes as the experimental-subgroup differences just cited, a plausible explanation of the overall AFDC finding would emerge. Effects opposite in sign and about twice as strong for those placed in OJT slots tend to counterbalance effects on those not in an OJT position, because the third of the sample placed in OJT slots is weighted half as heavily in overall impacts.

CHAPTER VI

1. Many of the techniques used in the analysis were first developed for the Supported Work evaluation, the Employment Opportunity Pilot Project evaluation, and evaluations of the other state programs in MDRC's Demonstration of State Work/Welfare Initiatives. See Kemper, Long and Thornton (1981) and Long and Knox (1985) for additional information. Details on the data and methodology underlying all estimates and all projections in this chapter are available from the authors.

2. OJT wage costs were calculated as the OJT contract wage multiplied by OJT contract scheduled hours per week, the product of which was multiplied by the actual length-of-stay according to WEET program staff records. For the 10 OJTs without contracts, the average total OJT wage (according to case records for a sample of 66 controls) was used.

3. The data, which are based on a national survey of firms, are reported in Employee Benefits 1985 (Washington: U.S. Chamber of Commerce. 1986). It should be noted that the exclusion of payroll taxes from this rate (it is treated under "Tax Payments" below) is a change from past MDRC evaluations of welfare employment programs.

4. In most OJT assignments employers paid full compensation -- that is, 100 percent of wages and fringe benefits -- to the

TOPS participants when they completed their assignments and were hired as regular employees, which suggests that the value of their work during the assignments was close to (if not more than) the full compensation level. In the work experience assignments, agencies indicated that the work done by TOPS participants was usually important to the agency, indicating that the value of their work was much greater than zero, although probably less than the full compensation level. For additional discussion, see Kemper and Long, 1981.

5. For work experience positions, the wage and fringe benefit rates used were what the employer would have paid a regular worker in that position. For OJT positions, the wage used was the average starting wage paid by the employer according to the OJT contracts. The fringe benefit rate used was the average paid by the employer according to the worksite survey.

6. The estimation of federal taxes used 1985 tax rates and exemptions for the observation period, since these applied to most of the earnings obtained during this period, and 1987 tax rates for the projection period, since most of the post-observation period falls under the newer tax laws. For state and local taxes, 1985 tax rates and regulations were used.

7. Food Stamps regulations dictate eligibility and benefit levels based on household income, where deductions are allowed for out-of-pocket work-related expenses such as child care, medical expenses and shelter costs. Within constraints of the available data, estimates of the value of Food Stamps have been made using U.S. Department of Agriculture procedures for calculating total income and total allowable deductions. Some of the data used in making these calculations were provided by the Maine Bureau of Food Stamps, Department of Human Services. It has been assumed that 80 percent of AFDC recipients actually receive Food Stamps, based on an unpublished tabulation made by the Department of Agriculture using the 1984 Survey of Income and Program Participationn (SIPP) panel.

8. OJT participants were considered on welfare, and under the normal Medicaid eligibility rules, even if they were not receiving a regular case grant due to OJT earnings. Until October 1984, an individual was eligible for Medicaid for four months after going off welfare. Subsequent changes in the regulations required states to provide nine months of Medicaid coverage to former AFDC recipients who lost their AFDC eligibility due to termination of the earnings disregard (i.e., the amount of earnings that had previously been excluded from the benefit calculation). For the benefit-cost analysis the estimated program effects on Medicaid credited persons as being eligible for Medicaid if they qualified

either under the four-month rule or the nine-month rule.

9. Data used to calculate the average value of Medicaid payments for AFDC recipients were obtained from the Maine Department of Human Services, Office of Data and Research, for January 1983. This estimate has been adjusted for inflation using the GNP price deflator to reflect 1985 dollars, the base year for all of the final results of this analysis.

10. The state administrative costs of AFDC and Medicaid were estimated as the product of the estimated per capita costs of administering these programs for one month during July 1984 through June 1985 and experimental-control differences in the number of months of eligibility. Federal administrative costs for each of these transfer programs were estimated on the basis of the ratio of total federal administrative expenditures to total federal transfer payments. Data for estimating the monthly administrative costs of AFDC and Medicaid were obtained from the Maine Department of Human Services, Divisions of Medicaid Policy and of Financial Services and the Appendix to the Federal Budget for Fiscal Years of 1986 and 1988. Unemployment compensation and Food Stamps administrative costs were estimated by multiplying the experimental-control differences in the average value of compensation payments received by the ratio of combined state and federal administrative costs to total benefits during FY 1985; data were obtained from Maine Bureau of Food Stamps, Department of Human Services, and Appendix to the Federal Budget.

11. The cost of Title XX child care used by TOPS clients was calculated with information from WEET about the proportion of it's clients receiving care funded by Title XX, and information from the Bureau of Social Services Planning and Evaluation Unit on the average length of care and the average cost per week.

12. In these 12 tests, one of the assumptions used to calculate the benchmark estimates was altered (keeping all other assumptions unchanged). The assumption regarding the discount rate, which as an annual real rate of 5 percent for the benchmark estimates of net present value, was changed to zero percent in one test and to 10 percent in a second. The decay rate assumption -- zero for the benchmark estimates -- was changed to an annual rate of 22 percent for one test and infinity (equivalent to assuming there are no future effects) in another. The base period estimates, which were the impacts measured in the last two quarters of the observation period for the benchmark estimates, was changed in several alternative ways: (1) the base was increased by 50 percent above what was measured for all types of impacts; (2) the base was

reduced by 50 percent for all impacts; (3) the base was increased by 50 percent for employment-related impacts only (that is, earnings, taxes, UI and Food Stamps); (4) the base was increased by 50 percent for welfare-related impacts only (AFDC and Medicaid); (5) the base was reduced by 50 percent for welfare impacts only; and (7) new base estimates were constructed using the last five available quarters of observation, where the last quarter was given the most weight and each prior quarter was given sucessively less weight. Finally, this last base estimate was tested in combination with an annual decay rate of 22 percent.

CHAPTER VII

1. See MDRC's findings on the AFDC target group in the National Supported Work Demonstration, MDRC Board of Directors, 1980.

2. Bangser et al., 1985 and 1986.

APPENDIX E

1. Parameter M is the effectiveness of participating for controls relative to the effectiveness of participating for experimentals. On the one hand, this ratio reflects the extent to which controls get services similar to those obtained by experimentals, whether they receive the equivalient of full treatment or only part of it. On the other hand, it also reflects self-selection among controls, and selection of controls by program operators; controls who participate may be those for whom the treatment is especially effective (M>1), or especially ineffective (M<1). When M=1, the treatment is just as effective for the average participating control as for the average participating experimental. Absent special selection effects, in most circumstances results for M=0 and for M=1 should bracket the true participation adjustment factor.

2. A further complication is that controls who participated may not be a random cross-section of controls but rather a selective group for whom the program impact is greater or smaller than average. If participating controls have larger impacts than average, the proper adjustment factor is larger than 1.49; if participating controls have smaller impacts than average, the proper adjustment factor is smaller than 1.49; if participating controls have impacts opposite in sign to average impacts, the proper adjustment factor is smaller than 1.12.

3. See Cave, 1988. In small samples, the ratio estimate is biased

by an amount proportional to the correlation between the numerator and the denominator. The standard error of the ratio involves this same correlation and the variance of the denominator as well as the variance of the numerator.

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